

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.







Entered as second-class matter June 26, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
MITCHELL BROS. COMPANY  
(INCORPORATED)

VOL XXVIII.

CHICAGO, ILLINOIS, AUGUST 15, 1909.

No. 2.

{ ONE DOLLAR PER ANNUM.  
SINGLE COPIES, TEN CENTS.

## THERE ARE MORE "S-A" BELT CONVEYORS IN USE

in this country than any other make. We are the largest manufacturers of this class of machinery. We have the most complete and up-to-date line of patterns. If you want Belt Conveyors see us.

### STEPHENS-ADAMSON MFG. CO.

Manufacturers of Conveying and  
Transmission Machinery

MAIN OFFICE AND WORKS, AURORA, ILL.

NEW YORK OFFICE—50 Church St.

CHICAGO OFFICE—First National Bank Bldg.



## Grain Elevator Belting

*of special construction*

**Best Made  
and Cheapest**

—Get our prices—

The Gutta Percha  
and  
Rubber Mfg. Co.

224-226 Randolph Street

CHICAGO

To those interested in Oats Bleaching—Let us tell you about our

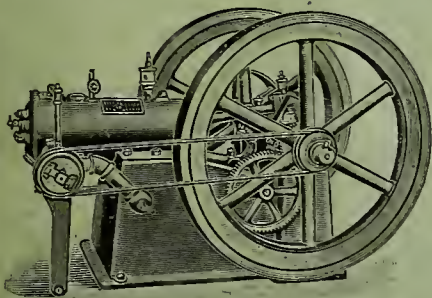
## Peterson Oats Bleacher

We have the most successful and practical system in use.

Those contemplating installing a bleaching or purifying system should write us.

**SKILLIN & RICHARDS MFG. CO., CHICAGO**

## Reliable and Cheap



Power is what you get when  
you use a

**Hagan Gas  
or Gasoline Engine**

Sold under a positive guarantee  
to give perfect satisfaction.  
Sizes 2-h. p. to 100-h. p. No  
packing; no delicate parts.

Send for Catalogue "C."

**HAGAN GAS ENGINE & MFG. CO., (Incorporated) Winchester, Ky.**

## The Engine for the Grain Trade

It is service that everybody wants in a gasoline engine.  
Service is better than cheapness, especially in grain shipping and handling.  
Don't experiment—get a certainty.

## FOOS Gas Engine Superiority

Is Proven by a Record of Twenty-One Years

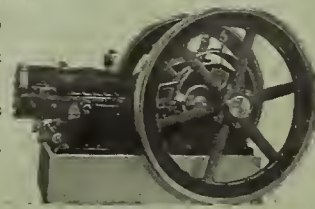
During the TWENTY-ONE YEARS the Foos factory has grown  
to be the LARGEST GASOLINE ENGINE FACTORY IN THE  
WORLD. There's only one explanation.

**FOOS GAS ENGINES MAKE GOOD**

If you are about to install a gasoline engine you want  
service above everything else.

Send for the Foos Catalog No. 39 and read it. It will  
convince you by the best of reasons that the Foos  
engine should be your engine.

**FOOS GAS ENGINE COMPANY**  
SPRINGFIELD, OHIO





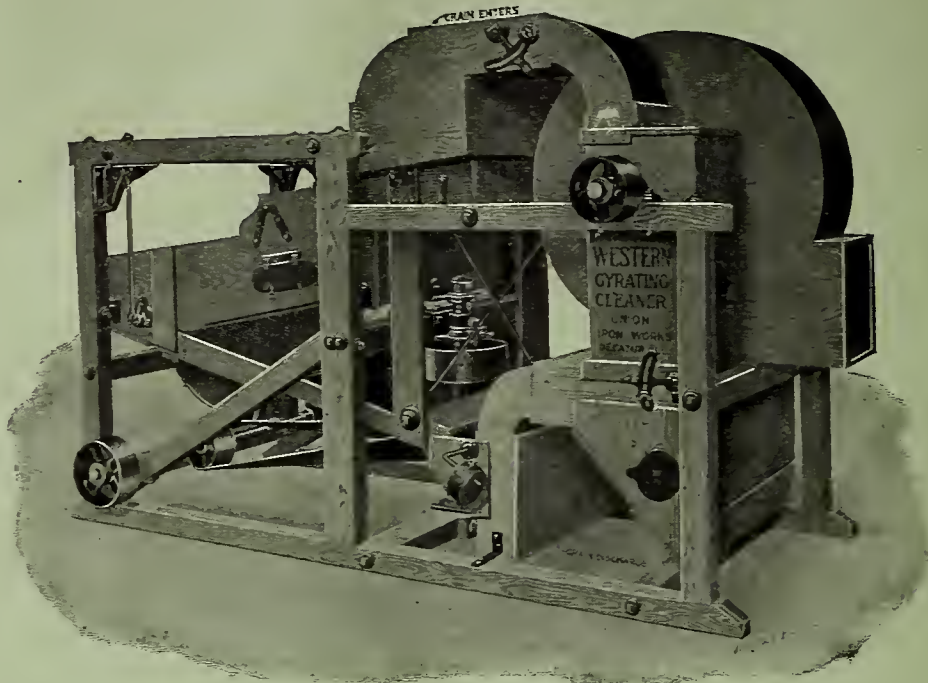
# Now is the Time to Look After Your Machinery

and while you are looking do not overlook the "WESTERN" Line.

WRITE FOR  
OUR NEW  
GENERAL CATALOG

26

EVERYTHING  
NEEDED  
IN A  
FIRST-CLASS  
ELEVATOR



The Western Gyrating Cleaner.

Greater capacity, better separation, better cleaning, better balance (less vibration), better control, greater durability, and last but not least the most convenient and least expensive machine to install.

WE BACK  
OUR MACHINERY  
WITH  
FORTY YEARS  
OF  
EXPERIENCE.

WESTERN  
MACHINERY  
IS PAST  
THE  
EXPERIMENTAL  
STAGE.

TERMS: We will ship these machines to any responsible party, anywhere, on 30 days' time with guarantee that the machine must be as represented above every respect. For further information address

**UNION IRON WORKS, Decatur, Illinois.**

Manufacturers of the celebrated "WESTERN" line of Shellers and Elevator Machinery.

Complete Stock of Shellers and Cleaners carried at 1221-1223 Union Ave., Kansas City, Mo.

## Elwood's Grain Tables

Show the value of any number of bushels or pounds of  
**WHEAT, RYE, OATS, CORN OR BARLEY**  
at any given price from 10 cents to \$2.00 per bushel.  
One of the most useful books ever offered to millers.  
Indorsed by prominent millers and grain dealers.  
Bound in cloth, 200 pages. Mailed on receipt of price.

**\$1.25**

**MITCHELL BROS. CO., 315 Dearborn St., Chicago, Ill.**

## Elevator Machinery and Supplies

**FLOUR AND FEED MILL MACHINERY  
STEAM AND GAS ENGINES**

Pulleys, Shafting, General Power Transmission Machinery, Roll  
Grinding and Corrugating

**Largest Factory and Stock in Western Country**

SEND FOR 450-PAGE CATALOG

**GREAT WESTERN MFG. CO.**

General Office and Factory  
LEAVENWORTH, KAN.

Warehouse and Salesrooms  
1221-1223 Union Ave.  
KANSAS CITY, MO.

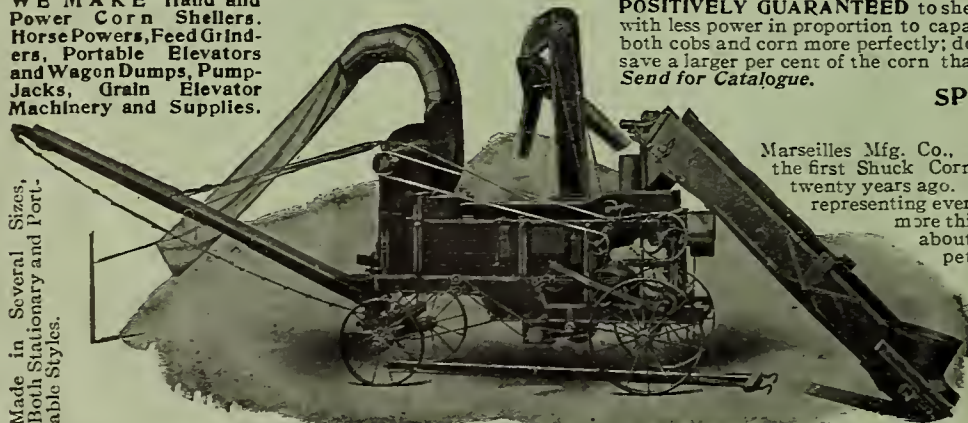
## SEEDS

Grain, Clover and Grass Seeds,  
**CHAS. E. PRUNTY,**  
7, 9 and 11 South Main St. SAINT LOUIS

## NEW MARSEILLES DUSTLESS CYLINDER CORN SHELLERS

WE MAKE Hand and  
Power Corn Shellers,  
Horse Powers, Feed Grinders,  
Portable Elevators  
and Wagon Dumps, Pump-  
Jacks, Grain Elevator  
Machinery and Supplies.

Made in Several Sizes,  
Both Stationary and Port-  
able Styles.



**POSITIVELY GUARANTEED** to shell either shucked or unshucked corn faster,  
with less power in proportion to capacity; take the corn off the cobs cleaner; clean  
both cobs and corn more perfectly; do less crushing or grinding of corn or cobs and  
save a larger per cent of the corn than any other cylinder sheller on the market.  
Send for Catalogue.

**SPEAKS FOR ITSELF**

Gainesville, Texas, May 12, 1908.  
Marseilles Mfg. Co., Marseilles, Ill.—Gentlemen:—We purchased  
the first Shuck Corn Sheller you ever made, some eighteen or  
twenty years ago. Since then we have bought 12 or 15 of them,  
representing every improvement, and expect to buy several  
more this season. We have bought one or more of  
about every other make and think we are com-  
petent judges of such machinery. Your Shell-  
ers husk and shell the corn off the cob more  
thoroughly; save it more completely; clean  
both the shelled corn and the cobs more  
perfectly; require less power in proportion  
to capacity. are more durably constructed  
and cost less, loss of time and cost of re-  
pairs considered, than any sheller we  
have ever used. We have thrown out  
every other kind of Corn Sheller we ever  
bought and have replaced them with  
yours. **KEEL & SON.** By J. Z. Keel.

**MARSEILLES MANUFACTURING COMPANY, Marseilles, Ill.**

Branch Houses and General Agencies at Principal Distributing Cities.

## Plain Gas Engine Sense

By E. L. OSBORNE

A BOOK for the man who has a gas or  
gasoline engine and wants to operate  
it to the best advantage.

The book is written in plain language and  
thoroughly covers the field of gas engine oper-  
ation.

**125 Pages of Practical Suggestions  
PRICE 50 CENTS**

**MITCHELL BROS. CO**  
315 Dearborn Street, CHICAGO, ILL.

Want ads. In this paper bring results.  
Rates on application.



# Chain Drag Feeders

The most satisfactory way of conveying all kinds of grain and using our Cast Iron Bottom, made to fit the chain, the drag can be used for all kinds of grain without mixing, as the chain cleans bottom of drag thoroughly.

These drags only require four upright timbers to support Sprockets, Rake Off and Head Tightener.

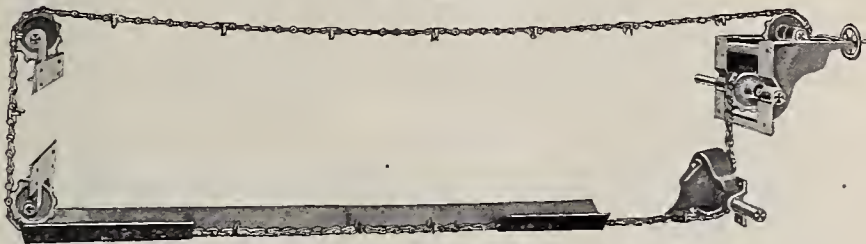
The Rake Off being adjustable to any incline of the chain, the timbers to support same are always perpendicular.

STYLE A



Chain Drag Feeders for Conveying all kinds of Grain from Dumps or Cribs to Sheller or Elevators.

STYLE B



Patent Applied For

Send for our Catalogue and Prices.

## Style A

DRAG consists of bottom box with Cast Iron Lining. Return box with wrought iron track, all necessary Sprockets, Rake Off, Tightener Head and Sprockets and Shafts.

All Iron Bearings with Oil Holes.

## Style B

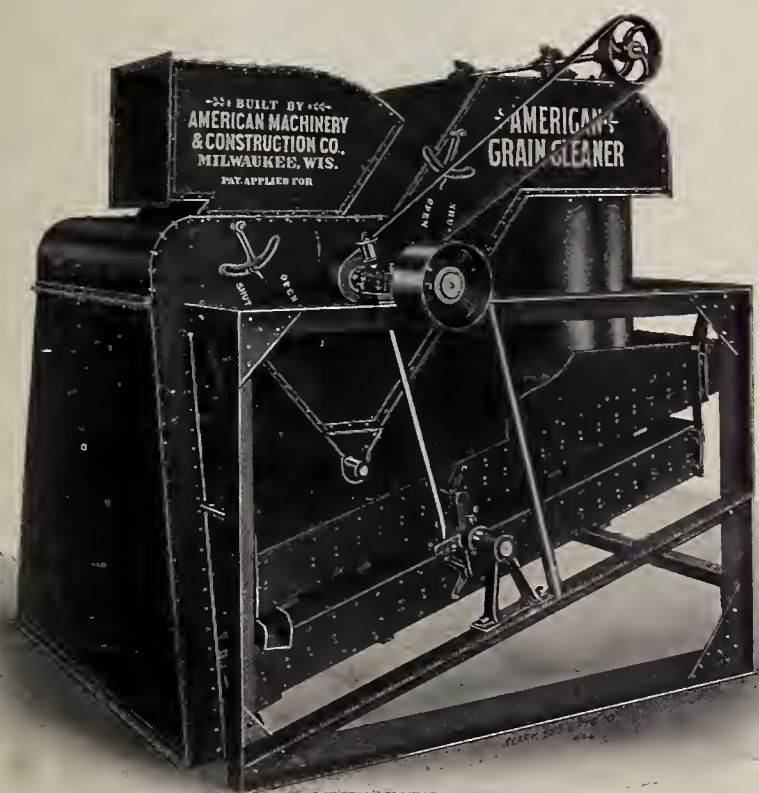
DRAG consists of all Iron parts and chain. No wood bottom and return boxes.

Either style made in any length.

For the Convenience of our patrons we carry a complete stock of Drags, Shellors, Cleaners, Manlifts, Dumps, Etc.

## The Philip Smith Mfg. Co., Sidney, Ohio

## Distinctive and Special Features of the American Grain Cleaner



The only adequate system for perfect Pneumatic Cleaning. Separates all chaff and other light impurities from the grain before it reaches the sieves.

Cleans more thoroughly and has a larger capacity than any other machine of equal size.

Requires only half as much power as any other separator of equal size and capacity.

Has double compensating shakers and is so absolutely perfect in counterbalance that positively no bracing of any kind is required.

Has interchangeable perforated steel sieves and each of the two shakers is fitted with a very large main screen and an equally large seed screen.

Spring steel wire Automatic Traveling Brushes which are strong and simple in operation are furnished with the machine when so ordered.

This cleaner is wonderfully simple in construction and operation, and only the very best of materials and expert workmanship enter into its manufacture.

It is the cheapest to install, operate and maintain, and is a source of continual satisfaction to the user.

Built in combination wood and steel, and in all steel construction.

Full particulars and prices sent on request.

## American Machinery & Construction Co.

103 West Water Street, MILWAUKEE, WIS.





# "EUREKA"



## Grain Dryers

remove any desired percentage of moisture from the grain, conditioning it for shipping or storage with perfect safety.

☐ Every kernel is uniformly conditioned without checking.



☐ Drying process automatic and continuous.

☐ Can be used as conditioner with cold air only.

☐ Absolute satisfaction guaranteed.

☐ Built in capacities from 10 bushels to 1000 bushels per hour.

PATENTED

SOLE MANUFACTURERS

### THE S. HOWES COMPANY

Originators of the Highest Grade Grain Cleaning Machinery

"EUREKA WORKS" = SILVER CREEK, N. Y.



REPRESENTATIVES

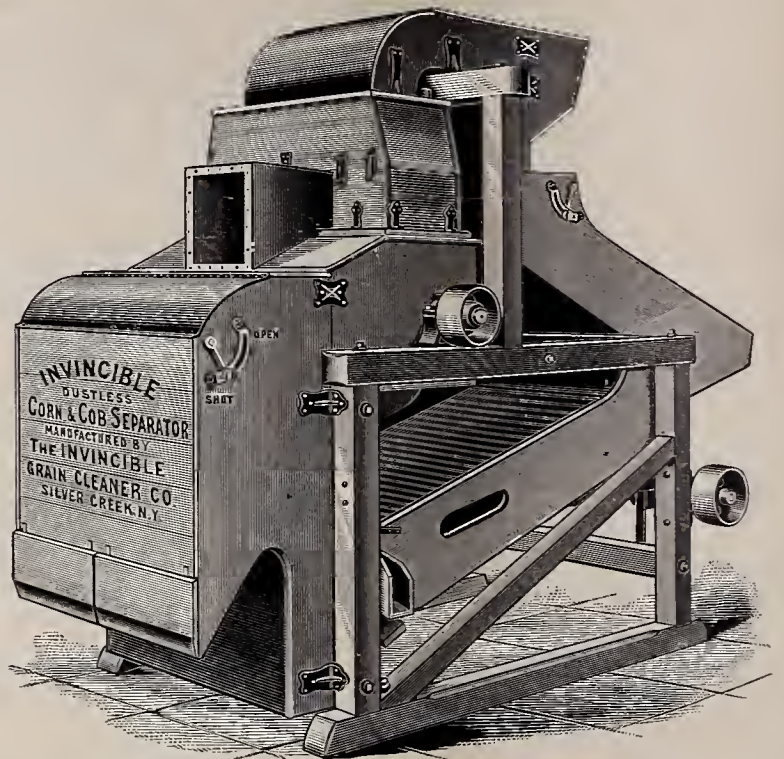
E. A. Pynch, 500 Corn Exch'ge, Minneapolis, Minn.  
J. Q. Smythe, 1513 Fletcher Av., Indianapolis, Ind.  
E. R. Watson, 223 E. Kentucky St., Louisville, Ky.  
Wm. Watson, Green's Hotel, Philadelphia, Pa.



## CLEAN YOUR CORN

This Separator takes out cobs, silks and all foreign matter and gives a high grade of corn.

It is the most popular corn and cob separator on the market, the result of its extremely nice work. Order now.



### INVINCIBLE GRAIN CLEANER COMPANY

SILVER CREEK, N. Y., U. S. A.

REPRESENTED BY

J. H. Pank, 512 Traders' Bldg., Chicago, Ill.  
F. J. Murphy, 225 Exchange Bldg., Kansas City, Mo.  
The Strong-Scott Mfg. Co., Minneapolis, Minn.  
C. L. Hogle, 526 Board of Trade, Indianapolis, Ind.  
Chas. Beatley, Terminal Hotel, St. Louis, Mo.  
J. J. Ross Mill Furnishing Co., Portland, Ore.

## The NATIONAL



is the Automatic Scale you have been looking for. A scale that will cause you no worry and one that you can **swear by**. A scale that will **accurately** weigh your grain while you do something else. ☐ TO OPERATE: Turn on the grain and "let 'er go." It is a scale and should be balanced occasionally. Your grain may not be in No. 1 condition and you may elevate very irregular, but you can't fool the NATIONAL.

☐ The simplicity of the NATIONAL, together with our long experience in the manufacture of automatic scales, enables us to offer this high-class machine at a surprisingly low figure. It is sold on approval.

ADDRESS

### THE NATIONAL AUTOMATIC SCALE COMPANY

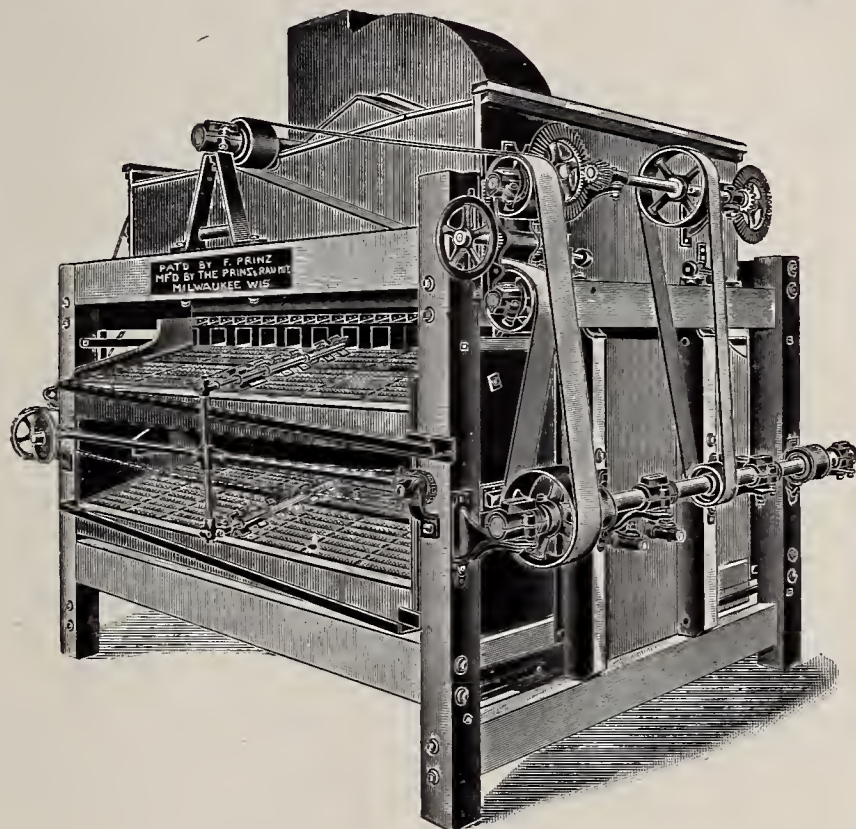
215 E. Douglas St., BLOOMINGTON, ILL.



# The Most Perfect Grain Cleaning

is done with

## Prinz Automatic Separators



These machines are in advance of all other grain cleaners now on the market. They are automatic in every sense of the word, and have many exclusive features that recommend them to wide-awake grain men.

**Sheet Steel Screens**, which stand the hardest kind of service and still retain their shape.

**Seed Screens** at the head of each sieve insure perfect separations.

The **Perfect Automatic Traveling Sieve Cleaners** keep the sieves clean under all conditions and require no attention.

**Perfect Ventilation** is insured by a large fan, and an **Automatic Feeder** spreads the grain the full width of the sieve.

*Write for Descriptive Circulars*

# THE PRINZ & RAU MFG. CO.

MILWAUKEE, WIS.

Represented by W. G. Clark, 701 Fisher Bldg., Chicago, Ill.; A. H. Kirk, 1-A Chamber of Commerce, Minneapolis, Minn.; F. E. Lehman, 124 Board of Trade, Kansas City, Mo.; C. H. Near, 757 Ellicott Square, Buffalo, N. Y.; M. D. Beardslee, 106 Piquette Ave., Detroit, Mich. European Representatives, Ingenieur Bureau, Prins Mauritsplein, La, The Hague, Holland.

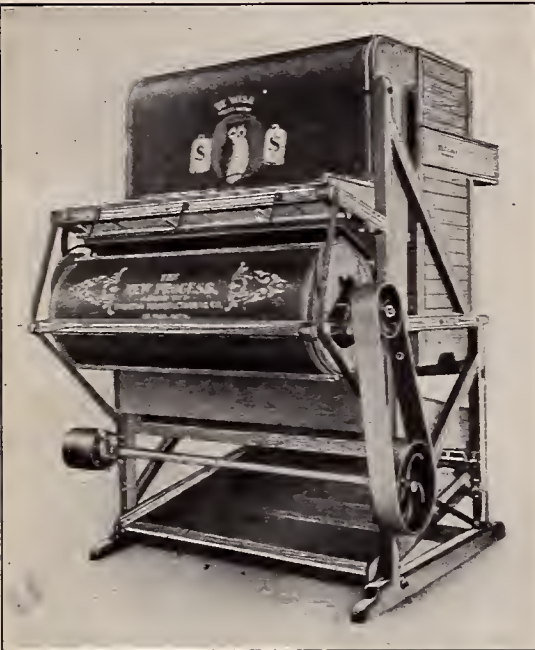


# Machine=Molded Gears

We manufacture a very complete line of Gears 1-inch pitch and larger; they are noted for their strength, durability, true rims, accurate pitch and smooth running. Hence they are highly efficient and economical. If you use gears you should have our Catalogue No. 27.

**H. W. CALDWELL & SON CO.,** Western Ave., 17th to 18th Sts., **Chicago**

NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church Street.



The New Process Dustless Elevator and Warehouse Cleaner

## FOSSTON MANUFACTURING CO. ST. PAUL, MINNESOTA

Builders of ELEVATOR and MILL SEPARATOR MACHINERY

### Our New Process Cleaner and Separator

is a thorough, complete and successful machine, built for practical use and to meet the conditions as they are found today.

It embodies new and exclusive features found on no other cleaner in the market, the most important of which are fully covered by our patents.

Our machines are specially adapted for separating wheat, oats and different kinds of mixed grain. Write for Special Catalogue.



Mr. GRAIN DEALER—The verdict will go against you if you have not an absolute record of all the grain you ship, because you have nothing on which to base a claim for any loss en route.

3500 LEAKY CARS are reported from Chicago—may be none of these were yours, but next time you may not be so fortunate.

Use a RICHARDSON AUTOMATIC SCALE and so get a positive record of all the grain you ship that you can absolutely swear is right, and so collect for leakage on the way.

This scale weighs dirty grain with sticks, straws, cobs, etc., without a miss,—also the lightest of oats up to rated capacity.

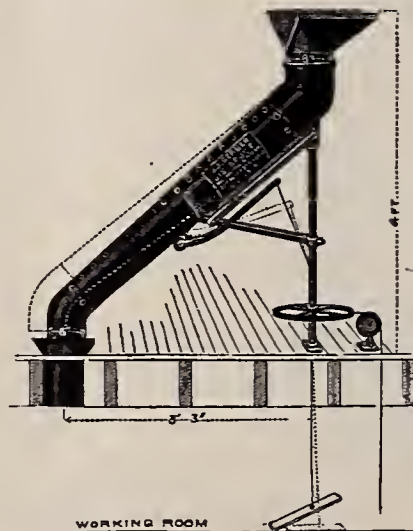
PROMPT SHIPMENTS GUARANTEED

**RICHARDSON SCALE COMPANY**

2 Park Row, New York, N. Y.

122 Monroe Street  
CHICAGO, ILL.

413 Third Street South,  
MINNEAPOLIS, MINN.



### Good Spouts Reasonable Prices

That is what you get when you buy the

### Gerber Improved No. 2 Distributing Spout

Will prevent mixing of grain. Can be operated from working floor. I make a specialty of elevator and mill spouting. For particulars write

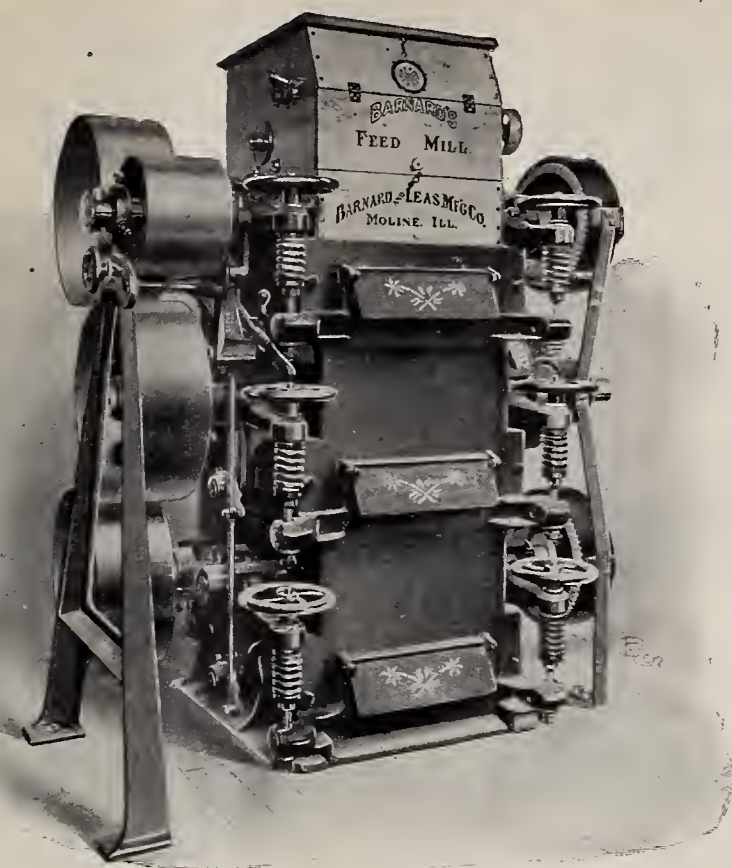
**J. J. Gerber,** MINNEAPOLIS MINNESOTA

## Elwood's Grain Tables

Show the value of any number of bushels or pounds of **WHEAT, RYE, OATS, CORN or BARLEY** at any given price from 10 cents to \$2.00 per bushel. One of the most useful books ever offered to millers. Indorsed by prominent millers and grain dealers. Bound in cloth, 200 pages. Mailed on receipt of price

~~~~~ \$1.25 ~~~~~  
**Mitchell Bros. Co., 315 Dearborn Street, Chicago, Ill.**





# Feed Mills

- ☐ We make them for all purposes.
- ☐ We make them for grinding all kinds of feed as well fine meal for table use.
- ☐ Our line includes Willford's Light Running Three Roller Mill and Barnard's One, Two and Three Pair High Mills.
- ☐ It pays to operate a grinding mill in connection with your other outfit. You utilize your spare power and add another source of income to your plant.
- ☐ Get our prices on **complete machinery equipments for Grain Elevators, Malt Houses, Cereal, Corn, Feed, Flour and Cement Mills.**
- ☐ Packers, Cleaners, Corn Shellers, Scourers, etc. Grain Dryers of all capacities, made to do the work right with least power under guarantee.

WRITE US TO-DAY WHEN YOU WILL BE IN THE MARKET AND WHAT YOU WILL NEED

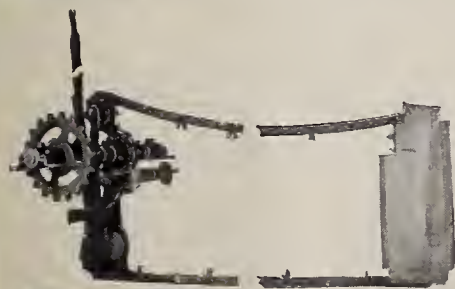
**BARNARD & LEAS MFG. CO.**  
MOLINE, ILL.



## CONSTANT MACHINERY IS WHAT YOU WANT THE SAFETY MAN LIFT

has roller bearings, which make it easily operated. The improved brakes and safety catch prevent accidents. The adjustable counterweights and springs make it all that could be desired. Buy ours; it pays.

### THE B. S. C. CHAIN FEEDER AND DRAG



for feeding elevator boots and shellers, any capacity, any distance, automatically. Handles all kinds of grain without waste or mixing.

The ONLY WAY to feed a sheller.

### THE U. S. CORN SHELLER

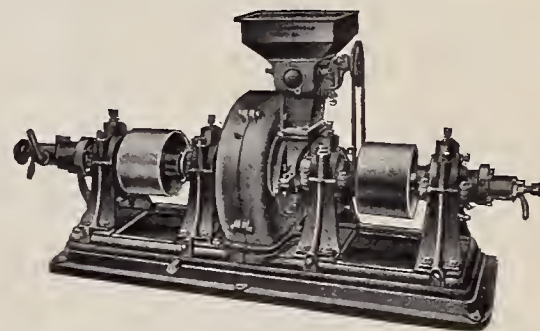
Patented Oct. 17, '05.

No pit or lower hopper. Cheapest installed. Quickest repaired. Our new Screw Adjustment can be used while sheller is full of corn and running. Shells clean, saves cobs. TRY IT.

Write for our catalog or you may miss something good

**B. S. CONSTANT CO.,** Bloomington, Ill.

## Why Not?



## The Monarch Attrition Mill

Will enable you to control the feed grinding business of your territory, so why not get in line for the extra profits that this will mean? You do not have to take our word as to the merits of the Monarch Mill; we have hundreds of testimonials from satisfied users.

It is the only mill that will grind all kinds of feed material just the way the trade wants it. This means that it is easy to hold the business after you have secured it. We have just the mill for your power.

### Send for Our New Catalogue

and learn all about the scientific grinding of feed. It treats the subject from a new standpoint and also tells why the Monarch has phosphor-bronze interchangeable bearings; cable-chain oilers; double movable base; safety spring; quick release; relief spring; special adjustable endless belt drives; hammered steel shafting; ball bearings and other improvements that are essential in the construction of a mill—durability, capacity, etc.

Mention amount and kind of power you expect to use for operating a mill

### SPROUT, WALDRON & COMPANY

John Williams Taylor, Southwestern Agent,  
491 Pacific Ave., DALLAS, TEXAS  
Northwestern Branch, 301 Corn Exchange Bldg.,  
MINNEAPOLIS, MINN., C. H. Mohr, Mgr.

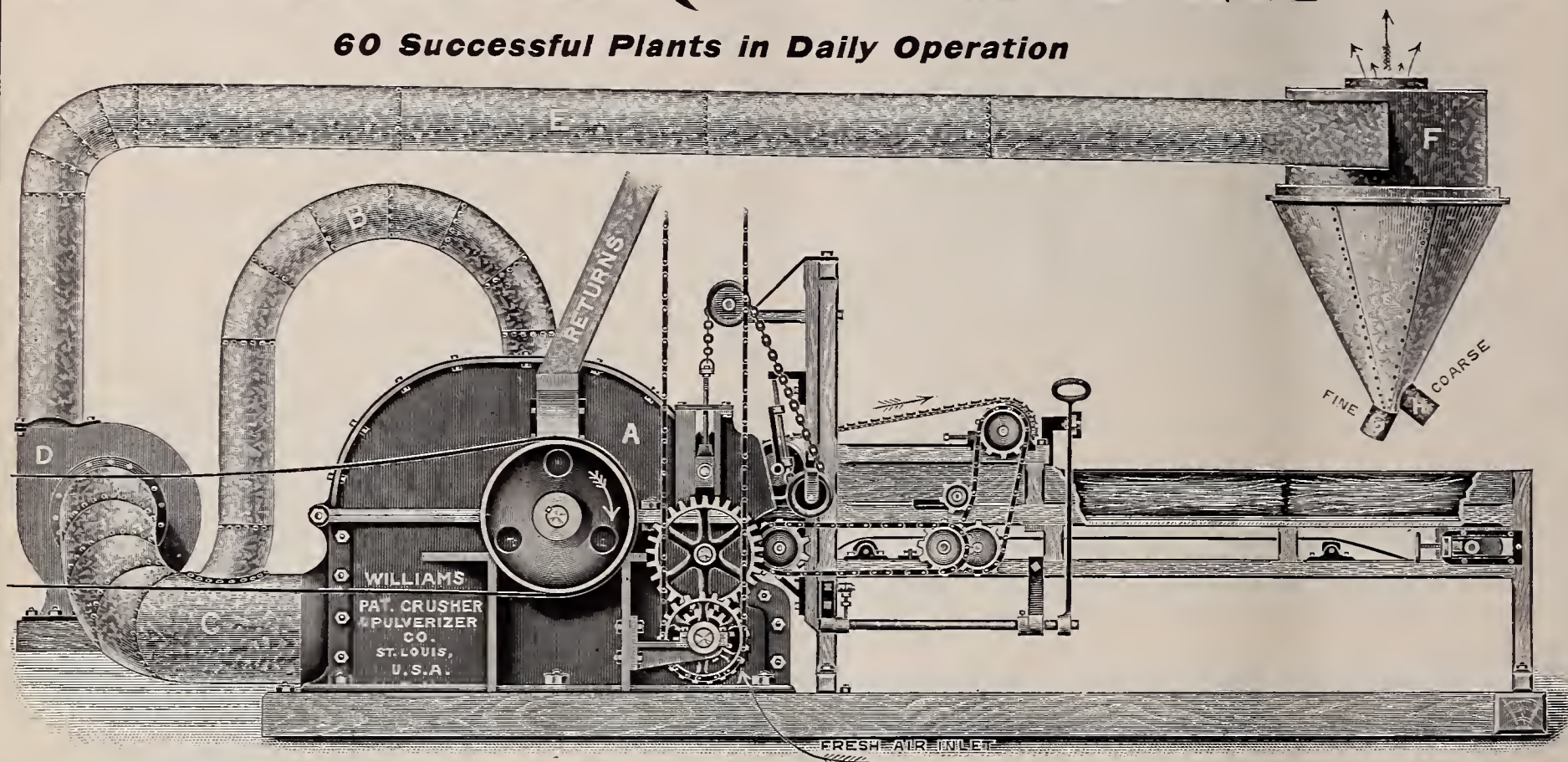
Box 320, Muncy, Pa.



# WILLIAMS PATENT COMBINED HAY AND STRAW CUTTER SHREDDER AND GRINDER

*Made in 6 Sizes*

**60 Successful Plants in Daily Operation**



## THE ONLY VERSATILE FEED GRINDER EVER PRODUCED

They will reduce EAR CORN with the HUSK on.  
They will reduce ALFALFA HAY from the BALE or from the STACKS.

They will reduce ALFALFA HAY and EAR CORN together.

They will reduce ALFALFA HAY and SHELLLED CORN together.

They will reduce ALFALFA HAY and OATS together.

They will reduce ALFALFA HAY and FODDER OF ALL KINDS, with the CORN on.

They will reduce ALFALFA HAY and PEA VINES.

They will reduce EAR CORN ALONE or SHELLLED CORN ALONE.

They will reduce OATS ALONE.

They will reduce ALFALFA HAY and two other kinds of CEREALS at the same time, as each machine has three separate feeding places.

They will reduce ANY FORAGE material or CEREAL, together or separately.

They will reduce GREEN CORN from the field.

They will reduce CLOVER HAY, TIMOTHY or ANY KIND OF STRAW.

They are CUTTERS when desired, GRINDERS when desired and SHREDDERS when desired.

They are COB CRUSHERS when desired.

They will reduce COARSE OR FINE by changing cages.

They will reduce OAT HULLS, RICE HULLS, FLAX SHIVES or any other FOOD MATERIAL.

They produce two grades of goods AT THE SAME TIME, coarse or fine, BY OUR COMBINED SYSTEM OF COLLECTING AND SEPARATING.

They WILL GIVE DOUBLE THE CAPACITY FOR THE POWER EXPENDED AND COST FOR REPAIRS OF ANY KNOWN GRINDER ON EARTH.

We have a corps of competent milling engineers in the field making estimates and taking contracts for the installation of complete alfalfa meal plants, from the stump up.

*For Further Information*

*Write for BULLETIN No. 7*

*Write for Catalog of the Noxon*

*Automatic Hay, Meal and All Around Feeder*

Southwestern Representative: A. G. Olds, Care Manhattan Hotel, Wichita, Kan.

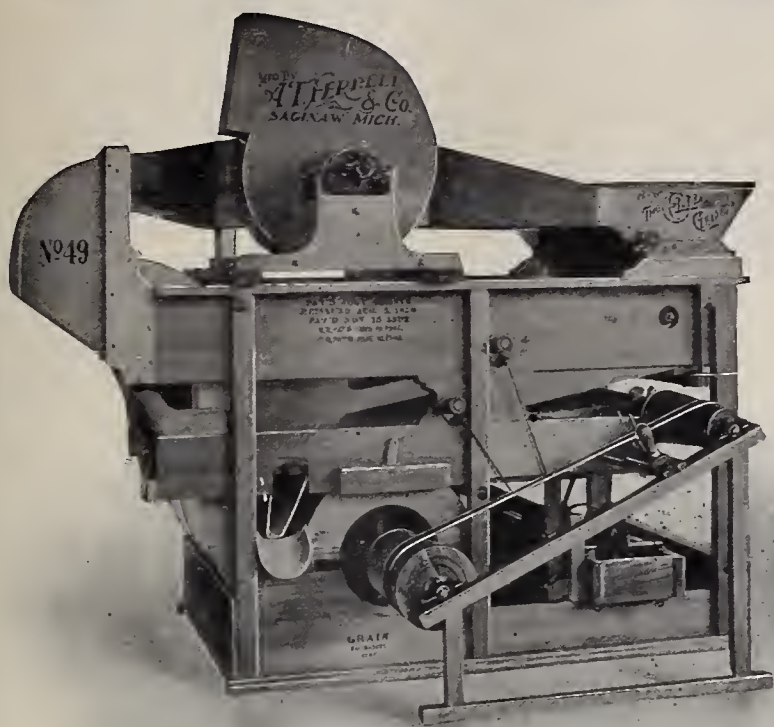
Northwestern Representative: J. J. Ross Mill Furnishing Co., Portland, Ore.

Pacific Coast Representative: O. J. Williams, 428 Monadnock Bldg., San Francisco, Cal.

**THE WILLIAMS PATENT CRUSHER & PULVERIZER COMPANY**  
ST. LOUIS, MO., U. S. A.



# The "CLIPPER" CLEANERS with TRAVELING BRUSHES



Our traveling Brush device is the simplest, strongest and best made. Strong fibre brushes are made to travel back and forth across the under side of the screens, thoroughly brushing them and freeing the perforations from any grain or seed with which they may become clogged, making it impossible for the meshes to fill up.

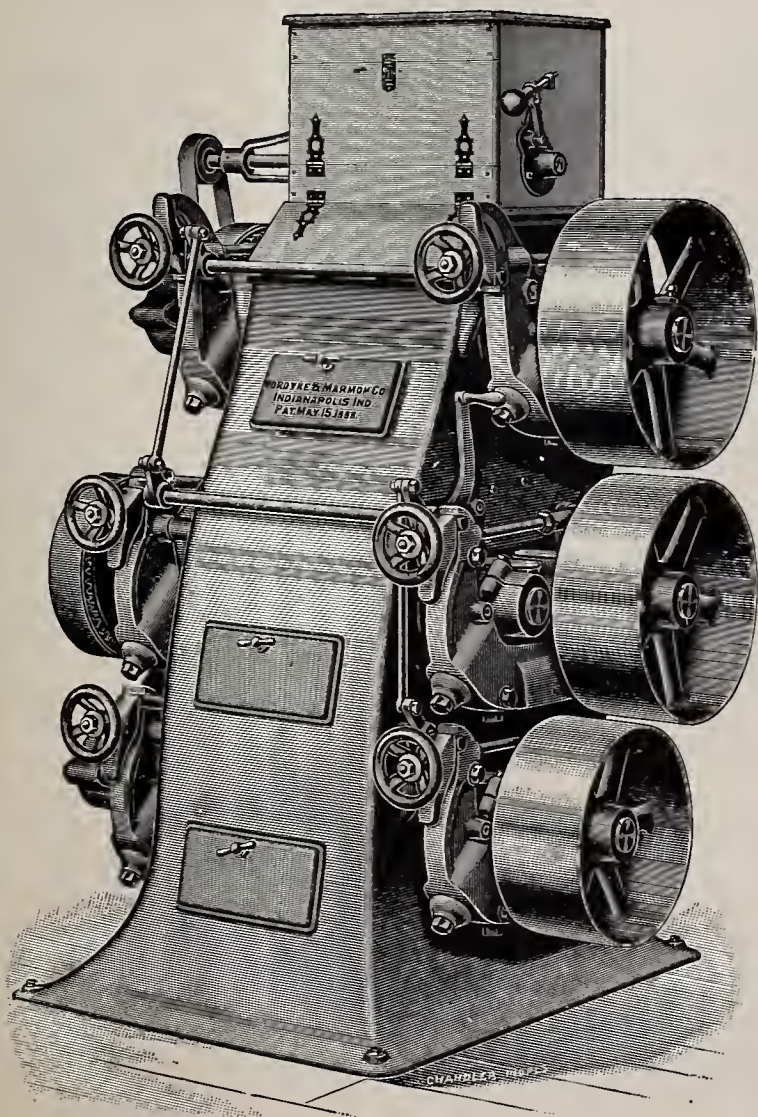
Any man who has used a Cleaner or Separator knows that the meshes or perforations in the lower screen soon become clogged so that it is necessary to "scrape" or "pound" the screen in order to clear the perforations. Our Traveling Brushes keep the screens clear all the time, and make the capacity and work of the machine uniform.

With a machine not equipped with the Traveling Brushes it is often necessary to keep one man in constant attendance when cleaning a dirty run of stock, to keep the screens clear and insure satisfactory work.

The advantages of using one of our machines equipped with Traveling Brushes is apparent: The quality of the work is improved; the capacity of the machine is increased; the cost of operation is reduced, and one has the satisfaction of knowing that he has the best that money can buy.

CATALOGUE WITH PRICES AND FULL DESCRIPTION UPON APPLICATION.

## A. T. FERRELL & CO., Saginaw, Michigan



The N. & M. Co.

## THREE-PAIR-HIGH SIX-ROLLER MILL

The most substantial, most economical in cost of maintenance. Has great capacity and requires comparatively small power. The only Six-Roller Mill with drive belts properly arranged to place the belt strain on bottom of bearings, where it belongs. It is not the cheapest mill in first cost, but it is by long odds the cheapest in the long run. It is without question the best roller feed mill on the market. Feed grinding pays best when you have a mill which will do perfectly any kind of grinding required and stand up under hard work without breakages and delays.

Send for Catalogue

### ELEVATOR SUPPLIES

We carry a complete stock of Heads and Boots, Elevator Buckets and other Elevator Supplies. All orders are given the very best of attention.

## Nordyke & Marmon Company

America's Leading Flour Mill Builders

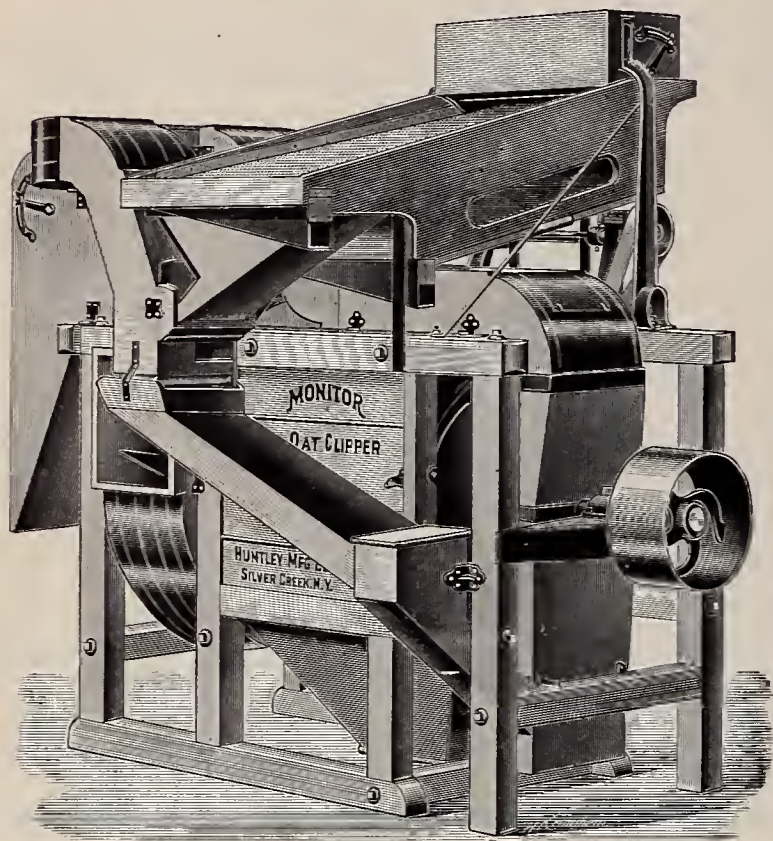
Established 1851

INDIANAPOLIS, IND.



# MONITORS

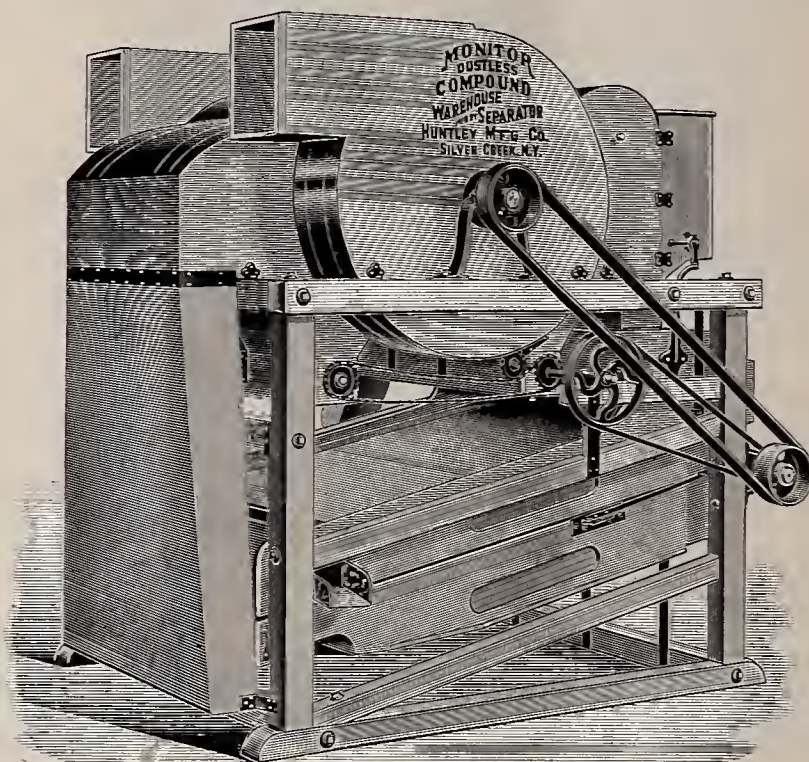
Patent Protected Products of the World's  
Largest Manufacturers of Grain and Seed  
Cleaning and Grading Machinery



The Monitor Combined Clipper and Cleaner

¶ Used as an oat clipper, this machine gives perfect results on any class of work. For use as a receiving cleaner, the "by-pass spout" is attached, giving two screen and two separate air separations.

¶ As a combined clipper and cleaner this machine has no equal.



The Monitor Automatic Elevator Separator

¶ This machine is equipped with our new improved style of deep reservoir ring-oiling bearings, patented automatic disc-oiling eccentrics, air-equalizing device and automatic sieve cleaning attachment. Undoubtedly the most successful cleaner on the market.

## WE MAKE

in over 50 distinct styles, seed and grain cleaners and graders. Our line contains a machine for every class of work required in the modern grain elevator. **MONITORS**, in principle, operation, and results obtained, are distinctly different and far superior to all other machines manufactured for similar purposes. Recognized everywhere as the World's Best.

**Huntley Manufacturing Co., Silver Creek, N. Y.**

### OUR AGENTS

CHICAGO, ILL.—F. M. Smith, 302 Traders Building.  
ST. LOUIS, MO.—S. J. McTiernan, 127 Chamber of Commerce  
KANSAS CITY, MO.—H. C. Draver, 10 Board of Trade.  
PORTLAND, ORE.—C. J. Groat, 717 East Burnside Street.

MINNEAPOLIS, MINN.—A. F. Shuler, 316 Fourth Ave., So.  
JACKSON, MICH.—A. H. Smith, 206 Lansing Avenue.  
AKRON, O.—A. S. Garman.  
OWEGO, N. Y.—J. H. Foote.

HOUSTON, TEXAS.—The D. J. Hayes Co.



# The American Elevator and Grain Trade

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

VOL. XXVIII.

CHICAGO, ILLINOIS, AUGUST 15, 1909.

No. 2.

## A REINFORCED CONCRETE ELEVATOR.

We are frequently called on for information regarding the keeping qualities, or the efficiency, of concrete as a material for building grain bins. The leading and often repeated question is: "Does the grain keep in good condition in concrete?" Our correspondents have frequently seen some sloppy looking material mixed up like mud pies for sidewalks, and the impression left looms up unfavorably when the suggestion is made that grain will keep in "that stuff." We have, therefore, for our illustration gone back several years for an example of a concrete storage elevator where the conditions of its service would furnish reliable information on this subject, and the experience there may help some who are still in the doubt and undecided to reach an intelligent decision when wrestling with this proposition.

Messrs. E. F. Spears & Sons of Paris, Ky., took up the proposition with many misgivings. Reliable information was not very accessible then and to be among the pioneers often means to be among the experimenters. The Macdonald Engineering Co. of Chicago had pretty nearly exhausted their store of persuasion before they got the contract and even then they had to furnish the guarantee of a big bonding company for two years before the proposition looked tolerable to E. F. Spears & Sons. The bond has now long since expired by limitation and today there are no more enthusiastic advocates of concrete for grain bin construction than the owners of this snug little storage of one hundred thousand bushels.

The bins were built octagon in their horizontal section, which gives a square interspace between the octagonal bins, each holding four thousand bushels, the larger bins having ten thousand bushels' capacity.

There is an open and well-lighted basement eight feet high under the storage which is used for the storage of empty sacks and contains conveyors and basement spouts for delivering the grain to the mill. The cupola, or "texas," is of moulded reinforced concrete and fitted with wire-glass windows. The roofs are made of unprotected fireproof concrete slabs and have been perfectly watertight without additional covering. The building is connected with the mill by means of a runway from the top of the bins to the upper portion of the mill and a conveyor gallery joins the two basements.

On the completion of the elevator storage by the contractors, they were awarded the contract for building the concrete stack shown in the cut.

There is no doubt that the use of concrete for

such purposes has long since passed the experimental stage, and while the more modern structures may be built somewhat smoother and with a better exterior appearance, the stability and efficiency of concrete for this purpose is fully demonstrated.

## CHEAP PROTECTION FROM LIGHTNING.

As from 700 to 800 people are killed, twice as many injured, and an immense amount of property destroyed by lightning every year, Professor Henry, of the Weather Bureau, thinks more attention should be given to protection from lightning. The professor has recently prepared a paper on this subject, and it has been published as Farmers' Bulletin No. 367 of the United States Department of Agriculture.



THE REINFORCED CONCRETE ELEVATOR OF E. F. SPEARS & SONS, PARIS, KY.  
Macdonald Engineering Co., Chicago, Ill., Engineers and Contractors.

In explaining what lightning is and how to prevent buildings from being struck, he gives an instructive elementary discussion of electricity, conductors and non-conductors, positive and negative electrification, and electricity in thunder storms.

It is the practical part of this paper, however, which will appeal most strongly to the readers. Professor Henry shows how lightning rods that are "inexpensive yet effective" may be put up by anybody. The following is his list of the necessary materials: Enough galvanized iron telegraph wire to serve for the rod, a pound of galvanized iron staples to hold the wire in place, a few connecting tees, and a pound of aluminum paint. He says: "While iron is not so good a conductor as copper, it is less likely to cause dangerous side flashes, and it also dissipates the energy of the lightning flash more effectively than does the copper."

The method of putting up the rods is explained and illustrated. This bulletin is for free distribution.

## [For the "American Elevator and Grain Trade."] HAVE ALL GRAIN INSPECTED PROMPTLY.

BY J. L. ROSENBERGER.

The case of Hardin et al. vs. Chicago & Alton Railway Co., 114 Southwestern Reporter, 1117, was brought by shippers to recover the value of two cars of oats shipped from Kansas City to Birmingham, Ala., and not delivered at destination to the shippers, who were also the consignees. The plaintiffs, who were grain merchants at Kansas City, bought the oats on track at Kansas City, and sold them to one Blackwell of Birmingham. It was found that the oats, which had been shipped to Kansas City from Iowa, were in defective cars, and after delivery to the defendant railway company they were transferred to other cars, and bills of

lading issued to the plaintiffs for the transportation of the cars through to Birmingham. The plaintiffs were designated as consignors and consignees, the bills of lading containing the notation: "Shippers' Order. Notify B. B. Blackwell, Birmingham, Ala."

The bills were dated, respectively, February 21 and 24. The transfer to different cars was completed about March 3d, and the shipment left Kansas City on that date. One car arrived at Birmingham on March 15th and the other a day later. The agent at Birmingham of the connecting carrier that completed the transportation immediately notified Blackwell of the arrival of the cars, but no response was made to the notices.

For the reason that the property was suffered to remain in the possession of the rail-

road company unclaimed, the agent turned the cars over to a commission company at Birmingham to sell for the account of whom it might concern. The first car to arrive was delivered to the commission company on April 7th, the second April 13th. The commission company opened the cars, and found the oats wet and badly damaged from having become heated. This was the first inspection made after the arrival of the oats at Birmingham, and no witness stated, or was able to state, the condition of the property at the time of its arrival. There was evidence to the effect that the roofs of both cars were leaky, and that the oats became wet in the course of the transportation. In good condition the property would have been worth approximately \$500 per car at Birmingham, but in its damaged state the broker was able to realize only \$300 for the contents of both cars. The proceeds of the sale, less the commission charged for selling, were turned over to the railroad company by the broker and applied to the payment of the freight charges, which had not



been paid in advance. After the payment of these charges, there remained \$13 or \$14 in the hands of the railroad company.

Granting the contention of the plaintiffs and other witnesses that the grain left Kansas City in sound and merchantable condition, the Kansas City Court of Appeals says that the fact that after it had remained in sealed cars from three weeks to a month in the yards at Birmingham it was found to be damaged by the processes of fermentation was no proof that it was in that condition when it arrived, and certainly was no proof of the extent of the damage, if any, sustained at that time. In directing that the damages be assessed at the value of the property on the respective dates of the arrival of the cars at Birmingham the trial court necessarily turned the jury into the fields of speculation and gave them rein to guess at the condition of the property. Doubtless the trial court was prompted to give such instructions by the idea that the defendant, if the main issue that the property was injured as the result of its negligence were found against it, should be held liable, not only for the damages sustained by the oats in transportation but also for those which occurred while the cars remained in the yards at Birmingham after the plaintiffs' vendee had been notified and thereby given a reasonable opportunity to inspect them. But such conclusion was not sound. The last carrier fully performed the contract of affreightment by giving to Blackwell prompt notice of the arrival of the cars. As between the parties to the contract, Blackwell was the agent of the plaintiffs for the purpose of receiving these notices, and notice to him was notice to the plaintiffs. They should have arranged for inspecting, receiving, and caring for the property on being notified of its arrival; and, in failing to do this, they must stand the loss sustained during the time the cars remained in the yards at Birmingham.

Again, the court says that, as it was conceded by the plaintiffs' witnesses, and the fact was obvious, that the damaging processes were at work while the cars were in the yards and it was impossible to know the extent of the damage wrought during that period, and as such damage, for the reasons stated, must be held to be the direct result of the fault of the plaintiffs' in not providing for an inspection promptly after being notified of its arrival and only the remote result of the negligence charged against the defendant railway company, it must follow that the recovery of the plaintiffs should have been restricted to the net proceeds of the sale of the oats.

### NEW GRADES IN KANSAS.

The Kansas State Grain Grading Commission met at Topeka on July 27-28 and, among other things, established a new classification for native wheat to be known as "Kansas Hard Turkey Wheat." This new classification, which is considered the highest grade in Kansas and which is expected to "top the market" in price, has been established in response to a request therefor by farmers, grain dealers and millers, as formulated in reply to a letter of enquiry sent out some weeks ago by the Governor.

The Commission's definition for the new classification, or grades, is as follows:

"Kansas Hard Turkey Wheat—Kansas hard winter wheat of the long berry, dark amber colored type of the Turkey varieties shall be classed as No. 1 Kansas Turkey Hard wheat; No. 2 Kansas Turkey Hard wheat; No. 3 Kansas Turkey Hard wheat and No. 4 Kansas Turkey Hard wheat. Inspection certificate shall be issued accordingly and the other specifications for each of these grades shall be the same as for Kansas hard wheat of the same grades.

While some grain men are of the opinion that the new grading will bring to the Kansas Hard Turkey Wheat a higher price because so differentiated from other Kansas hard wheats, the Commission is doubtful on the point. State Grain Inspector White, fresh from the farm, on the other hand, has no doubts on the subject. He is positive that the new grade will not bring the results promised for it.

"I am certain of this," said Mr. White; "it will greatly increase the work in the grain inspection department and is likely to be the cause of many disputes. It is hard to draw the line between different grades of wheat. I do not believe that the

grain will bring any better prices under this new grade than it has heretofore. I have always found that it is the wheat itself that sets the price and not the grade. The dealers can't sell the grade. They have to have the wheat and they have had that all along. However, the dealers wanted the grade and they have it."

No other changes of any consequence were made by the Commission.

### HENRY A. HILLMER.

Henry A. Hillmer, of Freeport, Ill., who was elected vice-president of the Illinois Grain Dealers' Association at the Peoria convention in June last, is the manager of The H. A. Hillmer Co., one of Freeport's wide-awake grain and coal firms, having elevator and yards at the foot of Exchange Street, where coal, wool, grain and feed are dealt in at wholesale and retail. This firm has three coal storage bins of about 3,000 tons' capacity and a grain elevator in Freeport, besides elevators at Ridott, German Valley, Dakota, Davis, Wadham and Florence Station, in this state. The Freeport yards adjoin the I. C. and C. & N.-W. tracks, while the out-of-town elevators of the company are located on the C. & N.-W., C., M. & St. P., I. C. and C. G. W. Rail-



HENRY A. HILLMER.

roads. This company's hobby is: "No coal too good for us to sell." They are also firm believers in a large use of printer's ink and spend more money for advertising annually than any coal firm in the city of Freeport.

The company was organized six years ago last January and has two stockholders, Henry A. Hillmer and Dr. C. L. Snyder, Mr. Hillmer being the active manager of the business. He has been in the same office, in the coal and grain business, since 1884, first as an employe of Smith & Porter, one of the pioneer grain firms of this section, later with H. J. Porter, and now as the head of the present company.

Mr. Hillmer is a director in the Illinois Grain Dealers' Association, also director in the Chas. E. Meyer & Co. Vinegar Works, and president of the Freeport Y. M. C. A. He is interested in all kinds of philanthropic work, and is also a firm believer in a "Greater Freeport," having acted as chairman of the Publicity Committee for 1908 of Freeport's Citizens' Commercial Association. He has confined all of his investments to Freeport real estate and Freeport enterprises and is as popular in Freeport as he is in the Illinois Association, where he is looked to as one of its most efficient workers and safest advisers. He is fond of good horses and is said to have one of the most valuable saddle horses ever brought to Freeport.

Farmers near Beaumont, Texas, are experimenting with broom corn with promising results.

### [For the "American Elevator and Grain Trade."] CONCERNING THE MORE GENERAL UTILIZATION OF THE MISSISSIPPI RIVER FOR THE MOVEMENT OF FREIGHT.

BY L. C. BREED.

That part of the press of the country which has earned a reputation for sane journalism, beside having a proper regard for its standing, also recognizes its responsibility to the public. It is an old and reprehensible custom in this country to favor great projects to be undertaken by the general Government, especially if such projects seem to have caught the popular fancy. On the papers which have the moral courage to demand facts and not opinions, rests the duty of seeking to investigate the merits of such propositions.

The writer, though having offered some suggestions and given some facts, has not seriously advocated the Lakes-to-the-Gulf waterway—i. e., the "14 feet through the valley" project. In the first place, we are conscious of a lack of knowledge of the subject and have grave doubt, even if practicable to devote sufficient time to the consideration of the subject, that it would be possible to grasp it in its entirety.

Since furnishing a couple of papers for the "AMERICAN ELEVATOR AND GRAIN TRADE," the writer has read a good deal pertaining to the matter and discussed it with leading business men in St. Louis and Memphis. For the purpose of gaining more knowledge of the physical conditions of the river than obtained locally at St. Louis and through a trip last summer from St. Louis to a considerable distance up the Illinois River, I have recently made the trip from Memphis to St. Louis with this end in view.

Before giving the data gleaned in this cursory way from the press, individuals and through personal observation, the writer invites attention to the following facts regarding the physical characteristics of the Mississippi River.

The word Mississippi means "great river"—literally "Father of Waters." It is the principal river of the North American continent and including the Missouri River is the longest in the world. Its source is nearly 1,500 feet above its mouth at the Gulf of Mexico. Its length is 2,500 miles, and counting the Missouri, has a total length of 4,200 miles. It has 240 tributaries and drains a basin of 1,257,000 square miles. The Ohio River, one of its most important tributaries, from Pittsburg to its mouth, is 963 miles long. Taken altogether, it represents a length of 14,000 miles, but in straight lines only 9,000 miles, thus showing 5,000 miles to be due to the windings of these rivers.

Below Cape Girardeau, on the west side, the whole country down to the Gulf is "bottom land" for an average width of fifty miles. From Cairo to the Gulf, the river flows in a channel on the summit of a low ridge, the land sloping gradually away from the banks on either side so that the greater part of the bottom lands lie below the level of the river surface. Floods cause a variation of over 50 feet between high and low water marks. The current is from three to six feet in a second according to existing conditions.

The distance from Cairo to the Gulf in a straight line is 600 miles, but the winds and twistings of the river make it 500 miles more. The sediment brought down annually is estimated to be over 400,000,000 tons.

Straightening the river, allowing it were possible, would convert it into an uncontrollable torrent. It deposits about fifteen feet of silt in places during a year and sometimes removed such deposits in a week or even less time. It removes the earth from one bank and carries part of it to the other side at a lower reach. When the pressure against one of its bow-shaped curves becomes too great, it gives way and the old bed of the river is converted into an immense lake. In some instances, towns built on the banks with the expectation that they were certain of permanent river navigation, after some years were practically abandoned, being de-



prived of access to the river, and others are now threatened with a similar fate.

In subsequent papers, the subject of utilizing the river under present conditions, which proposition seems to be gaining ground, will be considered, and such data as may be secured will be presented to the readers of this journal.

### INSPECTION SCANDAL AT KANSAS CITY.

The charges filed against Chief Grain Inspector H. C. Nunn at Kansas City, Mo., in June last and then superficially investigated were reopened on July 29 by the Railroad and Warehouse Commission. The complaint in June was that the chief inspector had permitted erroneous inspection to be made and had granted certificates based on such irregular inspections. To particularize: a deputy inspector at the Milwaukee Elevator said that he had graded certain wheat out of that house as "mixed wheat," on account of being a mixture of red and hard wheats, and that later, in the office of the shipper, the certificate was changed to show a grading as "No. 2 Red," and that the records of the inspection and weighing and registrar's offices were changed to fit the suppositious facts. The Chief Inspector, Mr. Nunn, assumed responsibility for the transaction.

Mr. Nunn's explanation, as appeared in the testimony of Fred. Dryer, chief clerk, was that the method adopted corrected a mistake which had been made, and that no one has been injured by the transaction and that no complaints have been made by anyone who owned or purchased the grain from the elevator. In 1907 grain of a certain grade was inspected into the elevator. Later it developed that several cars of a better grade of wheat were being taken from the elevator. The inspection in the elevator did not show this better grade of wheat. To correct this, fictitious certificates were issued which did not increase the tonnage of wheat in the elevator, but did correct the mistake of inspection.

No one apparently lost anything by the transaction; but the affair created some talk in the market, as the investigation in June demonstrated that the inspection on track was much more severe than the out-inspection; also that the inspection for export was more liberal than that of grain going to the mills; or, as it was put at the time, "the further the grain goes from Kansas City the less severe the inspection." It also appeared that the "convenience (customs) of the market" rather than the grading rules themselves have governed the inspection.

The matter in June was taken under advisement by the Commissioners, and J. T. Bradwell, Chief Weighmaster, who filed the original complaint, was directed to be more specific in his charges. As the matter now stands there is clearly a factional row on in the department, in which "politics" is somewhat of a factor; and this fact gave the color to the proceedings of July 29. When Mr. Bradshaw had filed charges formulating as facts the statement above made, Inspector Nunn immediately filed a motion reciting that John R. Knott, one of the Commissioners, was prejudiced and was following up the charges not for the good of the department but because he was "after Nunn's scalp" and because the other Commissioners had removed from a deputyship one of Mr. Knott's relatives; and all the testimony thereafter taken, that was different from that heard in June, was directed to the point of this motion, which, however, was overruled.

The Commission now has the matter under advisement.

The Pittsburgh Hay and Grain Reporter says that the conditions of the trade on oats have been very unsatisfactory in that market, the demand having been light and receipts in excess of demand. Owing to the high prices consumption has been reduced. "Feeders have consumed a vast amount of substitutes for oats during the industrial depression. Faithful beasts of burden have been compelled to exist (we used the word advisedly) on concoctions, labeled 'horse and cattle food,' that contained almost every conceivable ingredient, from low grade molasses to oat hulls. The result of such economy has only become now patent, since the horses are being required to go to hard work

again. One of our large feeders told a representative of this paper that he figured that he had actually lost every dollar he invested in these cheap feeds, and had lost another dollar in horse flesh for every one invested in the feed. He is now feeding good oats and saving money. With a bountiful crop of oats and, we believe, a well-saved crop almost assured, we feel confident that Pittsburgh will consume 25 per cent more oats during the coming year than she did in the year just closing."

### J. VINING TAYLOR.

J. Vining Taylor's election to be secretary of the National Hay Association is a promotion, so to say, as he had for some time been acting as assistant secretary-treasurer of the Association under P. E. Goodrich, who for several years has been the efficient executive officer of the Association.

Mr. Taylor has had a good business training for this trying and important position. Born in Richmond, Va., on July 18, 1877, after receiving a partial common school education, at the early age of thirteen he entered the service of the C. & O. R. R. as a messenger boy. Having been employed by this company in various capacities in the East for about twelve years, he came to the West when the general offices of the company were removed to Cincinnati.



J. VINING TAYLOR.

nati. Later, or about eight years ago, he went to Winchester, Ind., where he was employed for a time in the local office of the G. R. & I. Ry. Co., and then he went to the Goodrich Bros. Hay & Grain Company, by whom he has been continually employed since, acting in the capacity of bookkeeper and cashier. His railroad experience united with his practical knowledge of the intricacies and difficulties of the hay and grain business therefore make him a peculiarly valuable man to the Hay Association. Mr. Taylor is married and has one child.

Samples of Velvet Chaff wheat in the straw brought in to Minneapolis the other day from Rosemount, Minn., where rust was reported, was about as perfect as could be. Not the least sign of rust was shown. Long, well-filled heads. Good judges say it would probably go 40 bus. to the acre. No wonder this kind of wheat is popular with farmers in about inverse ratio to its unpopularity with millers.

A well-known agriculturist who traveled by the C. P. R. Montreal to Ottawa recently remarked upon the poor crop prospect of hay in the Ottawa Valley and that he was surprised to see the meadows on either side of the track one mass of buttercups, daisies and mustard in rich profusion among the timothy and clover. This demonstrates the fact that farming is degenerating in those sections of country which formerly produced the richest crops of hay.

[From Farmers' Bulletin 362.]

### FACTORS INFLUENCING THE HAY INDUSTRY.

BY HARRY B. McCLURE.

At the present time there is considerable confusion and misunderstanding regarding the value of the different kinds and grades of market hay. The producer many times does not know what the market requires in regard to purity, or freedom from volunteer grasses, weeds, etc., and quality, which depends on methods of cutting, curing and baling. The average feeder often thinks that one kind of hay will answer all feeding purposes and pays a very high price for this kind; consequently, when other kinds which may be more valuable than the standard market hay are sent to the market, they sell at a price which is not very profitable to the producer. This is because the feeder's ideas concerning the feeding value of certain kinds of hay are erroneous. As a result of these misunderstandings both feeder and producer lose money. In order that all concerned in the hay industry, namely, producer, shipper, receiver and feeder, may each receive his share of profit from the growing, handling or feeding of hay, it is necessary that they work together in harmony for their mutual benefit. In order to do this and place the hay business on a better foundation, the following points are important:

(1) A better knowledge by the feeder of the feeding value of the different kinds and grades of market hay would be of decided advantage to both feeder and producer. The feeding value of any kind of hay should depend primarily upon the purpose for which it is fed.

(2) Producers in general must realize that it is the feeder who makes the price of hay, and in order to secure the most profit his demands in regard to quality must be met regardless of the producer's opinion. This difference of opinion may be illustrated by the fact that in many sections timothy cut at the end of or even after the blooming period is preferred for feeding on the farm, while the city feeder prefers that which is cut nearer the beginning of the blooming period, and will pay a higher price for this kind.

(3) Growing hay for the market is profitable only when the better grades are secured and when the loss of fertility is no greater than it is in other systems of farming, such as live-stock and dairy farming.

(4) There are a number of bad practices on the producer's part that not only lower the value of the product and thus lessen his profits, but are a source of constant trouble in the disposal of the hay. It is largely on account of such practices that buyers and commission men have been led to seriously consider the problem of how to prevent low-grade hay from going to market. The writer's investigations indicate that at present three-fourths of the low-grade market hay is the result of improper practices, such as allowing the meadow to become grassy and weedy, cutting too late, improper baling, etc., on the part of the producer, and is not caused by rain or unfavorable weather alone, as is generally supposed.

(5) In order to grow timothy hay successfully year after year, the farmer must also grow some legume crop in the rotation for either hay or pasture or as a green-manuring crop, which aids in keeping up the crop-producing power of the land.

Legume hay does not sell well in most markets, primarily because horse feeders have not yet learned the value of clover or alfalfa hay. A proper understanding of the value of these hays on the part of the feeders would be an enormous benefit to the whole hay industry.

The average horse feeder is too liable to think that the hay which is selling for the highest price on the market is the most valuable for all feeding purposes under all conditions. He should change some of his beliefs, especially in regard to some of the kinds of hay.

It is almost impossible to place a definite money value on any kind or grade of hay that will at the same time represent its true value to both producer and feeder. This is because the value may depend on several things, such as the purpose for which it



is fed; the place where it is fed, for hay feed on the producer's farm has a different value to him than to the city feeder; the price of the more concentrated foodstuffs; and the size of the total crop for the United States.

When considering the profit from hay growing the farmer must consider not only the cost of production, or growing, curing, baling and marketing, but to a certain extent the value of the fertilizing elements which the crop removes from the soil.

The feeder should value any kind of hay according to the amount of digestible nutrients which it contains, its palatability, and its efficiency in keeping the horse in good condition and enabling it to accomplish the desired amount of work. The Southern feeder especially should understand the value of hay, for there are many kinds and grades in Southern markets.

#### A. WALLER & CO.

The quite pretentious plant shown in the accompanying picture stands in the busy town of Henderson, Ky., and is the property of A. Waller & Co., wholesale dealers in grain and manufacturers of mixed feeds, the daily capacity of the mill being 2,500 bags daily.

The plant was built in 1892, and is much more expensively constructed than is common in this country, where business men of all sorts, especially in the smaller towns, appears to be satisfied with inferior buildings and take no account whatever of architectural appearances.

The elevator has storage capacity of 200,000 bushels, and is equipped with a full line of handling and cleaning machinery. Adjoining the elevator is a warehouse 80x150 ft. in size, built in 1892. The sheller capacity is about 1,000 bushels per hour, and the handling capacity in and out of bulk grain 2,000

#### ATLANTA GETS ON THE MAP.

The Commerce Commission has filed a decision declaring the "elevation allowance" and "rebilling" privileges allowed at Nashville to handlers of grain constitute a discrimination against Atlanta and some other cities in the Southeast in favor of Nashville, and at once ordered their discontinuance after September 1, 1909. Later, however, the Commission granted an extension of time before the order shall become effective to January 1, 1910.

The complaint (officially styled W. S. Duncan & Co. et al. vs. the N., C. & St. L. Ry. Co.) filed in this case was substantially as follows:

This complaint is brought to remove an artificial condition created by the carriers in favor of Nashville, Tenn., which condition constitutes an illegal discrimination in favor of dealers in hay, grain and grain products at Nashville, and against such dealers elsewhere in the Southeast, and for the purpose of obtaining a differential between freight charges on such when carried in car loads and when carried in less than car load lots. The discrimination in favor of Nashville consists principally of two privileges granted by the carriers to that market and not allowed to the other Southeastern distributing centers. These are:

(a) The rebilling or reshipping privilege, being the right to ship commodities locally into Nashville and then within six months to ship out a like quantity of the same kind of commodity at a rate which, with the local paid when the original shipment was made, equals the through rate had the commodity not been stopped at Nashville, and which rate is less than the published rate for the two local shipments.

(b) The payment by the carriers to public private elevators and to warehouses and stores having sacking facilities, of three-fourths of a cent per hundred pounds on grain sacked at Nashville and upon which the carriers at Nashville had not previously participated in a like payment.

Neither of these privileges are granted to any of the complainants herein, and the first was condemned at Kansas City and East St. Louis by this commission.

Testimony was taken in the case in December last, and the arguments were made in March. The

At Nashville, says the Tennessean, the decision was received with considerable concern and in order "to protect a grain business that amounts to more than \$45,000,000 a year the dealers, especially those who are members of the Nashville Grain Exchange, in the event the decision is so sweeping as to deprive Nashville of these great weapons in the fight for business, will enjoin the operation of the rule laid down by the Commission, and carry the question into the Federal Court. But this is not the last resort; for if the rule of the Commission be sustained by adjudication, the Nashville men will compel the Commission to allow living railroad rates into and out of Nashville, by establishing packet lines to carry grain to all the important Southeastern markets. This would make what is called river competition, which admits of special railroad rates to meet it."

#### INDEMNITY MAN IN COURT.

S. R. Norris, manager of the exploded Minnesota Grain Indemnity Co. of Minneapolis, who is believed to have absorbed \$175,000 of other people's money on a sort of "gold brick" deal, is now in court. He sold "shares" in his company to 400 persons in lots of \$25 to \$8,000 at \$25 "per share"; and when enquiries became too urgent, he retired—was "missing" for several days. Then a receiver for the company was applied for, but there did not appear to be anything to receive, except the office furniture, his balance at the Northwestern National Bank having disappeared with the depositor. Nor could the Federal officers see where there was cause for action on their part, for Norris had not used the mails, had solicited no business that way, and he gave out his reports by hand to customers who called. He had not advertised. Neither was the Minnesota Grain Indemnity Company incorporated nor was there anything on its certificates of stock that carried a definite promise. In short, the status of the company was figured out by the lawyers to be an association of speculators, each buying stock and delegating the power to speculate for them to a company with the promise that whatever the profits were each share of stock should get its pro rata distribution but nothing definite as to how or when profits should be made or distributed.

On May 31 the company issued a statement showing 4,717 shares sold at \$25 each, of which but 29 had been afterwards redeemed; the proceeds of the sale being distributed in brokers' hands at Minneapolis (\$30,180) and Chicago (\$76,230) and in bank and vault (\$10,790). The profits are named as \$108,499.10, beginning with \$2,958.50 in June, 1908, and closing with \$31,050 in April and \$18,800 for first 14 days of May. It has since been impossible to locate his deposits with brokers at either Minneapolis or Chicago, nor do his employees know that Norris ever had any dealing with Chicago brokers, while all his operations were "very mysterious."

After the first panic of the explosion of his scheme Norris came out of hiding and was arrested on a charge of obtaining money by false pretenses, to which Norris when arraigned pleaded not guilty and being at once unable to obtain bail of \$3,500 was sent to jail. A day or two later he obtained bail. Then in answer to a petition in involuntary bankruptcy Norris denied that he was indebted in any way to the petitioners, or that he had any creditors holding or owning provable debts. He averred that he had been speculating in wheat with the full consent and knowledge of the petitioners and specifically denied every allegation made by them. He concluded by saying that the petition was not made in good faith and asked that his property and holdings be returned to him and that the petition be denied.

Although the results of Norris's operations are an old story—widows and poor men stripped of their money by appeals to their cupidity, yet the lawyers say Norris was so shrewd in covering his tracks his case seems to be without a legal precedent. He wrote no letters and made no written promises of any kind. His verbal representations to his patrons doubtless were enticing, but upon



WALLER & CO.'S ELEVATOR AND FEED MILL AT HENDERSON, KY.

bushels per hour. The feed mill capacity is about five cars daily.

A. Waller & Co. operate in connection with this Henderson plant about 30 country stations in Illinois, Indiana and Kentucky, making them one of the most important firms in their line in Kentucky.

The editor begs to acknowledge receipt of the quarterly report of the Kansas State Board of Agriculture (March). The leading papers are on beef- and pork-making, feeding work horses, use of the fanning mill in selecting seeds, culture of cow-peas, Kansas feeding stuffs law, etc.

First new oats arrivals are reported at Chicago on July 19 to H. W. Rogers & Brother from Lexington, Ill., graded no grade on account of heating, weighed 30 lbs. and sold at 44c; at Toledo on July 26 from Illinois, graded No. 3 mixed; at St. Louis July 19, four cars red from Oklahoma, and one from Missouri, the latter grading No. 2.

decision in substance is, that, "The circumstances and conditions prevailing at Nashville are not so dissimilar from those prevailing at other points in the Southeast as to warrant a continuance of the rebilling privilege at Nashville without undue discrimination, to the prejudice and disadvantage of points in that territory not having a similar privilege."

It was held further that "the 'allowance' privilege operates as a device by which traffic may move at less than the lawful tariff rate."

Naturally Atlanta men are quite enthusiastic and one grain man predicted that, "Atlanta will now become the grain center of this section of the South; you will see grain elevators built in Atlanta and the Atlanta grain dealers will now sell to their rightful territory, instead of being undersold by Nashville right at their own doors. A quarter of million dollars increase in the grain business is a conservative estimate of the result."



analysis they will be found, it is thought, that he conveyed to investors only what might easily be made out to be nothing more than the honest opinion of Norris in his own ability to make money in the markets. The certificates of stock do not contain anything definite in their wording. No specific dividend is promised, nor any dividend, in fact. A shareholder will find little on the face of his certificate upon which to begin action. Although dividends were paid for eleven consecutive months there was no promise that they would always continue. The business was essentially speculative. The statements issued by Norris, showing earnings made from time to time and the item of \$72,200, said to be in the hands of Chicago brokers, might form the base for successful prosecution, but the whole case is peculiar and has features that are

#### VIEW IN OFFICE OF ARTHUR R. SAWERS.

At a little before the opening of 'Change on a recent morning on the Chicago Board of Trade, a photographer took a picture of the office of Arthur R. Sawers in the Postal Telegraph Building. The result of the photographer's art is shown in our illustration.

About the only time when all the force is present in a cash grain house is just before the tap of the bell at 9:30. It is the moment of calm before the battle, the lull before the storm, a short moment of quiet preparation before the three and three-quarters hours of activity, when the shippers' interests are to be taken care of in large and small sales of grain which arrived the day previous. This moment of preparation is apparent in the picture.



VIEW IN OFFICE OF ARTHUR R. SAWERS.

not easily matched in the records of cases in this part of the country.

#### THE McMILLAN CASE.

The examination by the Wisconsin Grain Commission at Superior into the charges of incompetency lodged against Chief Inspector Archie McMillan by the Superior Board of Trade and employees of the Commission has been concluded and the case dismissed by the Commissioners. His attorney declared that while he had the right of appeal from the finding of the Commission, should it be adverse to him, he "has no desire to work for the Commission if the force under him is dissatisfied. If the Commission decides against him he will sever his connection with the inspection department at once.

"Not a single one of the accusations made against Mr. McMillan have been supported by the evidence presented here," said the attorney in his argument to the Commission. "The whole uproar is due to petty politics which must be eliminated if the Wisconsin inspection is to be a success. If Wisconsin inspection is to do the work which the city and state expects of it the employees of the Commission must work in harmony.

"The Commission should give instructions as to the manner in which it expects the inspection to be conducted and it is then up to the inspector to see that these orders are carried out. As far as can be gathered from the evidence presented here the inspector did carry out the instructions of the Commission."

The Commission decided that Mr. McMillan was competent and that the charges against him were unfounded.

Up to July 1, fifty-six new elevators had been built this season in Saskatchewan. By the time grain is moving it is estimated there will be 200 new houses in the province, increasing the storage capacity to 24,139,500 bus.

Mr. Sawers is seen at his desk at the right of the illustration and just back of him and seated at his desk is the assistant manager, Harry F. Todd. The others in the picture are Walter E. Bloomquist, office manager; Edward Byrne, who has charge of the speculative accounts; William Wright, mailing clerk, and last but not least, Miss Humes, stenographer, who has been with Mr. Sawers for several years and whose work has always shown, in whatever department of the business it has been displayed, a marked ability.

Mr. Sawers has been in the grain business all his life. He removed to Chicago in 1887, and, with the exception of a short absence in the South, has remained in the city ever since. The present business was started in July, 1905. He has always been prominent in grain association work, more especially in connection with Grain Dealers' National Association which he has served as director for several years. At present besides being in the directory, he is also a member of the executive committee.

#### GRAIN TAX IN MINNESOTA.

The new grain tax law of Minnesota applies to all grain handled through local and terminal elevators; and the fact that grain is taxed in one elevator does not relieve it from taxation in any other elevator where it is subsequently handled, says a circular letter from the State Tax Commissioner to county auditors. This tax is to be "in lieu of all other such taxes."

When an elevator is in proximity to and is used for storage purposes in connection with the operation of a mill or malting house, where grain is manufactured into flour, malt, oil, etc., the grain is not subject to the tax. Grain received at elevators, at mills or malting houses and again shipped out without being milled, is subject to the tax. Where a mill or malt house is engaged in operating elevators not in proximity to the mill, but at other points in the State, the fact that the main

purpose of the elevator is to secure grain for milling does not exempt it from the tax.

The tax must be paid on all grain handled between March 1, 1908, and March 17, 1909, even though it may have been taxed as personal property on hand May 1, 1908. Grain manufactured into flour, malt, etc., if on hand May 1, 1908, is subject to assessment as other personal property and is not affected by the new law. All grain on hand May 1, whether in elevators or wherever it is, which is not subject to the bushel tax, is to be assessed and taxed as other personal property.

The rate is  $\frac{1}{4}$  mill per bushel on wheat and flax; other grains  $\frac{1}{8}$  mill.

[For the Oklahoma Association.]

#### GRAIN INSPECTION AND ITS INFLUENCE ON TRADE.

BY JOHN D. SHANAHAN.\*

The situation in regard to corn is relatively the same as that in any one of the wheat areas or districts mentioned. The corn crop of 1907 was in round numbers 2,592 million bushels. The movement in trade of this crop was 467½ million bushels, and of this movement 391 million bushels, or 83.4 per cent, were produced in eight states, namely, Illinois, Indiana, Nebraska, Iowa, Missouri, Kansas, Oklahoma and Ohio, named in the order of amount furnished. Therefore, the corn producing area from which the grain trade draws its main supply is a comparatively small one that might be likened to a wedge or triangle, with Ohio forming its eastern, Oklahoma its southwestern and Nebraska its northwestern points, or corners. The states next in importance to the trade, with the exceptions of Maryland and Virginia, which together furnished about 12 million bushels, are closely clustered around this triangle. The next important state not named is Texas, which furnished 14 million bushels, or a trifle less than half as much as Oklahoma.

The corn of commerce is practically of but one class. Dent, into which are grouped many more or less distinct varieties, and for commercial purposes this class differs in value only in quality, condition and color, quality being indicated largely by the state of maturity, development, and the amount of damaged kernels, and the condition is largely fixed by its moisture content. It does not, therefore, seem impossible or undesirable to base grades of corn upon the prevailing condition of the crops in this territory for a series of years, taking into consideration in doing so its capacity to stand ordinary and necessary punishment of storage and transportation, and restricting the range in economic values in and between the grades to a reasonable basis.

In a talk to the Kansas Grain Dealers' Association recently, I made some statements which, while attracting considerable interest, were not clearly understood in some quarters, and in consequence were the cause of some remarkable feats in arithmetical gymnastics being performed by correspondents of the trade press. For that reason, therefore, I will ask your indulgence for a few moments while I restate the circumstances in order that they may be more clearly understood.

During the heaviest part of each exporting season (the winter and spring) of 1905-6, 1906-7, and 1907-8, the Department of Agriculture maintained in Europe a grain standardization laboratory in charge of a representative, for the purpose of examining cargoes of American grain on arrival there and to study the general situation relating to our export grain trade with European countries. Of the corn graded No. 2 and mixed corn, "Sail Grade" in the United States, there were examined during the first season a total of 4,354,681 bushels, of which 526,192 bushels, or 12.08 per cent, were found either in a heating condition or damaged when discharged from the ships. During the second season the results were 6,598,351 bushels examined and 1,120,900

\*An address by John D. Shanahan, Technologist in Charge, Grain Standardization, Bureau of Plant Industry, United States Department of Agriculture, before the Oklahoma Grain Dealers' Association, Oklahoma City, May 19, 20, 1909, concluded from July number, p. 23.



bushels, or 16.99 per cent, found in a heating or damaged condition, and the results of the third season's examinations were 4,124,955 bushels examined and 264,282 bushels, or 6.41 per cent, found heating or damaged. The remarkable decrease in the percentage of heating and damaged corn abroad during the last period can be attributed in part to the high price of corn in the United States, which practically shut off exports during the early spring of 1908, and before warm weather began; in part to a more careful inspection of grain for export because of the agitation at home and abroad for a Federal grain inspection law, and in part to the work of the Department of Agriculture.

#### FOREIGN VALUE OF AMERICAN CORN.

I also stated that European merchants everywhere assured me that American corn laid down in Europe in good condition, or in as good condition as the corn received from other countries, should bring an average of five cents per bushel more than the corn from any other country, and that I had carefully gone over the market prices for corn from the different exporting countries, including the United States, as quoted "off stands" Mark Lane, London, for six consecutive years and found that American corn was quoted at an average price of nearly two cents below the average of the corn from all other countries and that the price paid for corn from Russia was quoted at an average price of nearly five cents per bushel higher than was the case for American corn. The market reports from which this information was obtained specifically stated that the prices given were all based upon a quarter of 480 pounds of corn.

The grain trade press and others interested in these statements have brought up the question as to whether or not we have developed in this country a quality of corn which is unprofitable because of its high moisture content and its consequent lack of capacity to stand punishment in storage and transportation, and have voiced an attitude that our inspection methods are satisfactory at home and there is, therefore, no need for any change in order to satisfy foreign criticism, and a disposition to disparage our export grain trade on the ground that it represents but a very small percentage of our production.

#### THE REAL VALUE OF CORN.

In regard to the first proposition, the fundamental basis of value in corn, or in any other cereal for that matter, is the amount and relative food value of its dry matter content. The moisture content desirable is influenced largely by the purposes for which the corn is to be used. Corn with a high excess moisture content may be profitably used for stock feeding purposes on the farm, but for storage and transportation purposes its relative value is reduced according to the amount of excess free moisture it contains, for the reason that it is transported in bulk in tight box cars and stored in bulk in practically tight bins, or, at least, under conditions in which the individual kernels or grains do not get a sufficient amount of air for their wellbeing, because a grain of corn is a living, breathing thing, consuming oxygen and exhaling carbonic acid gas, and this respiratory activity is much more pronounced with excessive moisture and temperature.

We buy and sell grain, and especially corn, upon a less rational basis than steel or coal. No progressive large consumer to-day purchases coal upon the basis of weight alone, but the price paid is regulated by its caloric value, or capacity to furnish energy through heat. The caloric value of corn, or its capacity to furnish energy to the animal or human body, lies almost entirely in its dry matter, and the necessary moisture for the process can be supplied cheaply from other sources. The moisture in corn varies under commercial conditions from about 12 per cent to over 30 per cent. We know that corn that has apparently been thoroughly dried under natural commercial conditions contains about 12 per cent of moisture, therefore an excess of that amount is largely an element of danger and waste.

If a bushel of corn containing 12 per cent of moisture is intrinsically worth 75 cents, the worth of the dry matter per bushel decreases about 0.85 of one

cent for each 1 per cent of added moisture as follows:

|                   |      |      |      |      |      |      |      |      |
|-------------------|------|------|------|------|------|------|------|------|
| Moisture per cent | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   |
| Worth cents       | .750 | .742 | .733 | .724 | .716 | .707 | .699 | .690 |
| Moisture per cent | 20   | 21   | 22   | 23   |      |      |      |      |
| Worth cents       | .682 | .673 | .665 | .656 |      |      |      |      |

It was undoubtedly the recognition of these and like principles that induced the large flour milling concerns of the Northwest to install expensive laboratories with high salaried men in charge to test their raw materials and finished products, and I have yet to hear anything that would indicate that these laboratories are unprofitable.

Personally, I am of the opinion that revolutionary measures in breeding corn are not necessary or desirable, but that more attention could with profit be given the matter of curing it before shipping or marketing, which, together with a reasonably rigid, logical, and honest grading for export, thereby preventing unsound grain in poor condition being certified on a basis of good, sound, and dry, would soon bring about more desirable conditions. With the present-day equipment at our export points for artificially drying grain there would be little difficulty in restricting the moisture content of corn for export to a reasonably safe basis, and conditions seem to warrant the assumption that it would be profitable to do so provided the grading at our seaboard was all done on the same basis.

#### INSPECTION METHODS.

As to the second proposition, that our inspection methods are satisfactory at home, it is a well-known fact that as a general thing comparatively little reliance is placed in the certificate of inspection of the big markets by large millers and other large purchasers of grain, who, when not in a position to examine their purchases personally, engage the services of an expert on the ground, whose approval of the quality and condition of the grain bought must be given before shipment or delivery can be made, and notwithstanding that the car load receipts of most markets are usually inspected before being offered for sale, trades among the members of any single market are almost invariably upon the basis of a representative sample for each car load bought and sold.

As to the third proposition, that our export trade is of small account because of its being but a small per centage of our production, let us try to find out just what it represents and its value, at least to our commerce in grain. The statistics and information used are based upon a period of six years between 1902 and 1907 inclusive, because complete information for those years is available and upon the receipts for the same period at the following 25 primary and export grain markets: Baltimore, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Detroit, Duluth, Galveston, Indianapolis, Kansas City, Memphis, Milwaukee, Minneapolis, New Orleans, Newport News, New York, Omaha, Peoria, Philadelphia, Portland, Me.; San Francisco, St. Louis, Toledo, and the Willamette District, which includes Portland, Ore.

During the period named there were produced in the United States in round numbers 15,463 million bushels of corn. There were shipped out of the counties where it was grown 3,358 million bushels or 21.7 per cent. The whole trade and commerce in corn, therefore, in the United States including our export trade, could not have amounted to more than 21.7 per cent of the production. The receipts of corn for the period in the before-mentioned twenty-five primary and export markets were in round numbers 1,869 million bushels, 12.1 per cent of the total production and 55.7 per cent of the total amount shipped out of the counties where grown. There were exported from the United States during the period about 486½ million bushels or 3.2 per cent of the production, 14.5 per cent of the amount shipped out of the counties where grown and 26 per cent of the total receipts of the twenty-five primary and export markets mentioned. This last percentage is liberal, for the reason that a large portion of the receipts at the export markets are originally received at the interior primary markets and are necessarily duplicated in the receipts at the export

points. It may, therefore, be said that nearly if not quite one-fourth of the grain business as generally understood is an export business.

The average of the high and low monthly prices for No. 2 corn at New York for a period of five calendar years from 1902 to 1906 inclusive, was 58.1 cents per bushel; and on the same basis the average price for mixed corn at Baltimore was 55.7 cents per bushel. On the basis of the average of both, or 56.9 cents per bushel, this corn was worth at our seaboard \$276,818,500, or an average of more than 46 million dollars a year. Thus the export trade in corn alone for a period of six years, while amounting to only 3.2 per cent of the production, represented 14.5 per cent of the amount shipped out of the counties where it was grown, and 26 per cent of the total receipts of 25 primary and export markets, and also represented a trifle over 35 per cent of the world's international trade in corn.

The situation in relation to wheat for the same period was as follows:

There were produced 3,923 million bushels. There were shipped out of the counties where grown 2,260 million bushels, or 57.6 per cent of the production. There were received at the same twenty-five primary and export markets 1,971 million bushels, or 50.2 per cent of the production and 87.2 per cent of the amount shipped out of counties. There were exported 375 million bushels, or 9.6 per cent of the production, 16.6 per cent of the amount shipped out of counties, and 19 per cent of the receipts of the twenty-five primary and export markets, and which represented 13.3 per cent of the world's international trade in wheat.

The average of the high and low monthly prices of No. 2 Red Wheat at New York for five years from 1902 to 1906 inclusive, was 94.14 cents per bushel and at Baltimore 86.56 cents per bushel. Based upon the average of the two, or 90.35 cents per bushel, the 375 million bushels exported were worth at our seaboard nearly 339 million dollars, or an average of about 56½ million dollars a year. These figures do not include about 400 million bushels of wheat exported during the same period in the shape of flour and which was worth as wheat at our seaboard, on the same basis, over 360 million dollars, or an average of about 60 million dollars a year.

On the foregoing basis, therefore, the exports of corn and wheat taken together from the United States amounted to 6.4 per cent of the total production, 15.6 per cent of the possible commerce, or the amounts shipped out of the counties where they were grown; 22.5 per cent of the receipts of 25 principal primary and export markets, represented 24.15 per cent of the world's international trade in corn and wheat, and added to the wealth, or at least to the purchasing power of the country, more than 600 million dollars, an average of more than 100 million dollars a year, not counting the exports of flour which would have amounted in wheat alone to about 360 million dollars more for the period, or a grand total average of over 160 million dollars a year.

In the light of the foregoing facts, and viewed from the standpoint of these facts, the export grain trade of the United States does not, therefore, seem a negligible quantity but appears rather to be an immensely important source of wealth and a question of vital and material interest to every man, woman, and child in our country.

"How does the inspection of grain for export affect the farmer?" was a question asked by the Congress last year. It has affected him unfavorably, because it has for the past ten years had an influence toward fixing the farm price of grain on a lower basis than even the average quality and the development of an antagonism in Europe toward American grain which has not only assisted in this but also in restricting the volume of grain sold out of the country. It is a well-known and admitted fact that the grades of No. 2 corn and its equivalents at our seaboard for export are based upon a quality and condition not better than that graded in the interior as No. 3 and is often of a quality equal only to or below No. 4, and that also much of the grade of No. 2 wheat for export, especially that from the Gulf ports, is based upon a quality not better than No.



4 of the grades of the interior markets; because, as it is claimed, these apparent discrepancies between the interior grades and those for export are necessary to insure a fair profit to the exporter. Much of the wheat and corn exported during the past ten years has not been in a fit condition for shipment on long voyages and has arrived in Europe in a heated and damaged condition, having deteriorated in transit.

It is also claimed that the foreign purchaser of this grain has discounted the risks he was obliged to take on account of the poor condition of these shipments; or, in other words, he was obliged to purchase at a sufficiently low price to insure him against loss on account of risks of deterioration. In view of the large proportion of our actual commerce in grain that is exported, it must be admitted that the prices in this country are influenced, if not actually, as claimed, made in Liverpool. This being true, the constant stream of the poorer qualities of our grain that has been going abroad in poor shipping condition for the past several years, and its consequent deterioration in transit, have undoubtedly had an unfavorable influence upon its worth in Europe where it came in competition with grain from other countries which was bought upon European terms and not upon the inspection certificate of the exporting country, a fact which induced the exporters from other countries to ship their best rather than their poorest grain. The prices fixed upon our grain in Europe, therefore, were not based upon grades of the same quality and condition as those traded in in our own country but upon the basis of its poorest quality, besides being discounted from risks on account of its tendency toward heating and deterioration in transit. That Liverpool does have a strong influence upon the prices of grain on the markets of the United States was rather graphically illustrated recently when, during a short absence of the leader of the bull movement now going on at Chicago, the price of wheat in Liverpool one day dropped 3½ cents per bushel and was immediately reflected by a drop of nearly 5 cents per bushel on the Chicago market.

Every business man realizes the worth of a friendly attitude toward his business and that an attitude of antagonism and unfriendliness on the part of his customers is costly, if not disastrous. It is impossible to estimate the loss of our grain because of the antagonistic attitude of our European customers toward the methods of inspection and grading at our Seaboard, which in the very nature of things is reflected back upon the farmer by influencing adversely the worth of the grain he produces, that he feeds to his stock and even the worth of that stock itself.

#### GRAIN FROM THE SOUTHWEST.

Now just a few words regarding the grain from your own section. An average of the corn shipped out of Southern Kansas, Oklahoma, and Texas, grades No. 2 for export and usually realizes in Europe a premium of from two to five cents per bushel over other exports of corn from the United States; but of the wheat from the same section, the story is not so satisfactory, excepting during a comparatively few seasons. When I talked to you two years ago, I told you that a certain class of merchants in the terminal markets welcomed the opportunity of handling a damaged grain crop in preference to one that was not, because of the greater opportunities for discrimination and manipulation. It is an unfortunate but true fact that more wheat that was damaged by heating after harvest was marketed out of this section during the past several years than in any other like section in the world. Undoubtedly much of this could have been prevented by the application of care and intelligence to the handling of this wheat in the field and in storage. It would seem to be for your own interest to use such influences as you may possess toward preventing a recurrence of these conditions so far as possible.

In conclusion, I wish also to say a few words in relation to the work we are carrying on in our grain standardization project. At Washington, and at eight outside laboratory stations, situated mainly

in the principal grain markets, the problems underlying the question of the economic values of the different kinds, classes, and grades of commercial grain are being studied in detail with a view to securing a sound basis upon which to fix commercial grades of grain.

In coöperation with the railroads, we are accompanying, following, and watching shipments of corn from different points in the middle and northern sections of the corn belt to New Orleans, examining shipments of corn before they leave the markets in which our laboratories are established and re-examining them at points of destination in which we also have laboratories, taking careful notes of the changes in temperature, moisture, humidity, etc., and observing effects of same upon the grain. Experiments with stored corn are being carried on in the elevators at Baltimore and New Orleans with a view to ascertaining the affects upon the different kinds and qualities of corn stored under various conditions and of ascertaining the cause of deterioration under those conditions.

At Fargo, N. D., we have planned a rather extensive study from the field to the final product in flour also, for the purpose of securing a basis for commercial grades of the different wheats produced in this country. This work is in coöperation with the North Dakota Agricultural Experiment Station,

#### HUTCHINSON ALFALFA PRODUCTS CO.

The plant of the Hutchinson Alfalfa Products Company, a picture of one portion of which appears herewith, is one of the best located and best equipped factories of its kind to be found. The main building is of brick, two and three stories in height, seventy-five by one hundred and twenty feet in size. A fine large iron-clad hay warehouse, thirty-five by one hundred and forty feet, with a power house twenty-four by forty feet in size, completes this part of this company's equipment. Power is furnished the plant by a Buckeye Natural Gas Engine of one hundred and fifty horsepower.

The machinery for milling alfalfa hay consists of a Williams Mill, having a capacity of three tons of excellent alfalfa meal every hour. A complete line of grain grinding and mixing machinery, together with hopper scales, elevators, etc., has been installed, making the daily capacity of this plant about six cars of mixed feed. The horse and mule feed of this company is a high-class quality product, made from alfalfa meal, cracked corn, corn flour, rolled oats and salt and is sold under the private name "Hapco."

The location of the plant of the Hutchinson Alfalfa Products Company, in the territory of alfalfa, corn and oats, and the excellent railroad facilities it enjoys, being on the main lines of the A., T.



ONE VIEW OF THE PLANT OF THE HUTCHINSON ALFALFA PRODUCTS CO.

the completely equipped experimental flour mill of which institution affords excellent facilities for work and information along this line. The work is rapidly progressing toward a point where it will soon be able to contribute some things of interest to a literature relating to the commercial aspect of grain production and marketing now woefully deficient and which should be useful and valuable to the producer, merchant, inspector, and consumer of grain alike.

The car of new wheat we received that inspected "blow to grade" was made No. 2 Red. The wheat was of good quality but just a trifle damp in parts of the car, but by putting through a blower, elevating and running, it was dried out and put in good shape. We mention this to show shippers that everything is done at Toledo to improve the grade and net the most money. Off grades wheat may sell lower than some shippers imagine. It is therefore best to buy them low and improve the condition if you have the facilities.—J. F. Zahm & Co.

The first grain of new crop (1909) to reach Portland, Ore., was 1,078 sacks of new wheat from Central Ferry, Snake River, on July 13. It was handled by steamer. Receipts of new-crop wheat at Portland in July are unusual and the receipt of a lot before the middle of the month is nearly if not quite a record breaker. In addition to the fact that the first shipment from Central Ferry occurred so early in July, the fact that the lot was taken to Portland by water "marks an epoch in the transportation business of the Northwest," says the Oregonian.

& S. F., C., R. I. & P., and Mo. Pac. Railroads, give it a peculiar advantage for the manufacture of a high class line of alfalfa feeds.

Earl N. Sapp, formerly cashier of the Commercial National Bank of Hutchinson, is president and general manager of the company, which this year has made unusual preparations to take care of its growing business by the purchase of the plant of the Artesian Valley Alfalfa Milling Co., of Fowler, Kansas. The location of this latter plant in the irrigated artesian valley of southwest Kansas makes the company's facilities for the production of choice green alfalfa meal unexcelled.

#### A NEW GRAIN DOOR.

Gus. Behrendt, car inspector, and A. Lindquist, car foreman of the Great Northern Railroad, together with George E. Chapman, of the Security Warehouse Co., have invented a car door which it is said the Great Northern will put into all its grain cars. The invention consists of two sets of doors, one taking the place of pine boards now used, the other serving as floor trap doors. The side doors are hinged to the car at the bottom and close from the inside. When the car is empty and used for other purposes, these doors fit into the top of the hopper even with the car floor. The trap doors fit flush with the bottom of the hopper. To unload a car all that is necessary is to drop these trap doors and the grain runs through the hopper into the grain pit.

The new schedule of warehouse rates in the wheat country of Washington are as follows: 50c a ton for storing grain for 30 days and 10 cents per ton



per month after the first 30 days. Formerly the charge was 75 cents per ton for storing until January 1, and 10 cents per month after January 1. Although the new prices are lower than the old, no one is satisfied. The independent warehouses operated by the farmer owners are charging but 50 cents per ton until the first of the year.

[Bureau of Plant Industry, Circular No. 32.]

## MOISTURE CONTENT AND SHRINKAGE IN GRAIN.

BY J. W. T. DUVEL.

Assistant in Charge of Laboratory Methods, Grain Standardization.

The moisture content and the shrinkage or loss in the weight of grain have been the cause of many misunderstandings between grain merchants and the operators of elevators and commercial grain driers because the shrinkage and the reduction in the percentage of moisture, resulting from the drying of grain, do not correspond. Moreover, since the development of the practical and rapid method for determining the moisture content of grain, as described by Brown and Duvel in a former publication of this Bureau,\* these misunderstandings have become much more pronounced. Investigations have revealed the fact that occasionally operators of elevators and commercial grain driers have even been accused of rendering insufficient returns on grain dried because the loss in weight due to drying always exceeds the percentage reduction in moisture.

### LOSS OF MATERIAL IN HANDLING.

In the handling of grain through an elevator, commercial grain drier, or over a conveyor, there is always a slight loss in weight due to the blowing out of small particles of broken grain, dust, chaff, etc. Likewise, if the air is dry there is usually some loss of water in the case of grain of comparatively high moisture content. On the other hand, if the grain is cold and the atmosphere at the time of "running" is warm and of high relative humidity there may be sufficient condensation of water on the cold grain to cause an appreciable increase in weight. Such variations as these, however, depend principally on the quality and condition of the grain, together with the condition of the atmosphere at the time of handling, and have nothing whatever to do with the difference between the loss in weight and reduction in moisture content as treated in this circular.

### REDUCTION OF MOISTURE AND SHRINKAGE.

Giving due consideration to the loss of material resulting from the handling of grain through an elevator, drier, etc., the reduction in the percentage of moisture is not the same as the percentage loss in weight, and should not be the same if the moisture content is properly determined and the weighing done correctly, notwithstanding the fact that water is the only substance liberated in the drying process.

The difference between the reduction in the percentage of moisture and the shrinkage exists because there is a constant change of base in making the moisture test. Moisture percentages are calculated on the basis of the wet sample, i. e., 100 grams of grain containing 20 per cent of moisture consist of 80 grams of dry material and 20 grams of free water. For the purpose of demonstration it is assumed that this 100 grams of grain containing 20 per cent of moisture be dried until the weight is reduced to 90 grams. The weight has, therefore, been reduced 10 per cent. During the drying, 10 grams, or one-half of the water, have been liberated and likewise 10 grams still remain in the grain, but the remaining 10 grams of water are contained in the partially dried grain, which weighs only 90 grams, i. e., ten-ninetieths, or one-ninth of the partially dried grain is water. This fraction expressed in percentage is equivalent to 11.1 per cent, which is the moisture content of the remaining 90 grams of grain. In actual practice the moisture content after drying would not be determined on the 90 grams alone, but a new sample of 100 grams, the same weight as was used for the original test, would be taken and this would contain 11.1 grams, equivalent to 11.1 per cent of water.

In the illustration here given there has been a reduction in weight from 100 grams to 90 grams, or a shrinkage of 10 per cent. The moisture content of the grain has been lowered from 20 per cent before drying to 11.1 per cent after drying, or a reduction of only 8.9 per cent. The shrinkage in weight, therefore, exceeds the reduction in moisture by 1.1 per cent. This difference, however, is not constant but depends on the quantity of water originally contained in the grain and the extent to which the drying is carried. Moreover, the difference increases irregularly until the moisture content is reduced approximately one-half, after which it gradually decreases and when the free water is entirely expelled the difference between the shrinkage in weight and the reduction in moisture content equals zero.

These variations are better shown in Table I, in which the original moisture content is taken as 25 per cent. The first part of the table shows the reduction in moisture content resulting with each 1 per cent of shrinkage. The second part shows the shrinkage corresponding to each 1 per cent of reduction in moisture.

TABLE I.—Comparative shrinkage in weight and reduction in moisture of grain when the original moisture content is 25 per cent.

| Shrinkage in weight. | Reduction in moisture content. | Excess of shrinkage over reduction in moisture. | Reduction in moisture content. | Shrinkage in weight. | Excess of shrinkage over reduction in moisture. |
|----------------------|--------------------------------|-------------------------------------------------|--------------------------------|----------------------|-------------------------------------------------|
| Per cent.            | Per cent.                      | Per cent.                                       | Per cent.                      | Per cent.            | Per cent.                                       |
| 0                    | 0.00                           | 0.00                                            | 0                              | 0.00                 | 0.00                                            |
| 1                    | 1.76                           | 1.76                                            | 1                              | 1.31                 | 1.31                                            |
| 2                    | 3.52                           | 3.52                                            | 2                              | 2.62                 | 2.62                                            |
| 3                    | 5.28                           | 5.28                                            | 3                              | 3.93                 | 3.93                                            |
| 4                    | 7.04                           | 7.04                                            | 4                              | 5.24                 | 5.24                                            |
| 5                    | 8.80                           | 8.80                                            | 5                              | 6.55                 | 6.55                                            |
| 6                    | 10.56                          | 10.56                                           | 6                              | 7.86                 | 7.86                                            |
| 7                    | 12.32                          | 12.32                                           | 7                              | 9.17                 | 9.17                                            |
| 8                    | 14.08                          | 14.08                                           | 8                              | 10.48                | 10.48                                           |
| 9                    | 15.84                          | 15.84                                           | 9                              | 11.79                | 11.79                                           |
| 10                   | 17.60                          | 17.60                                           | 10                             | 13.10                | 13.10                                           |
| 11                   | 19.36                          | 19.36                                           | 11                             | 14.41                | 14.41                                           |
| 12                   | 21.12                          | 21.12                                           | 12                             | 15.72                | 15.72                                           |
| 13                   | 22.88                          | 22.88                                           | 13                             | 17.03                | 17.03                                           |
| 14                   | 24.64                          | 24.64                                           | 14                             | 18.34                | 18.34                                           |
| 15                   | 26.40                          | 26.40                                           | 15                             | 19.65                | 19.65                                           |
| 16                   | 28.16                          | 28.16                                           | 16                             | 20.96                | 20.96                                           |
| 17                   | 29.92                          | 29.92                                           | 17                             | 22.27                | 22.27                                           |
| 18                   | 31.68                          | 31.68                                           | 18                             | 23.58                | 23.58                                           |
| 19                   | 33.44                          | 33.44                                           | 19                             | 24.89                | 24.89                                           |
| 20                   | 35.20                          | 35.20                                           | 20                             | 26.20                | 26.20                                           |
| 21                   | 36.96                          | 36.96                                           | 21                             | 27.51                | 27.51                                           |
| 22                   | 38.72                          | 38.72                                           | 22                             | 28.82                | 28.82                                           |
| 23                   | 40.48                          | 40.48                                           | 23                             | 30.13                | 30.13                                           |
| 24                   | 42.24                          | 42.24                                           | 24                             | 31.44                | 31.44                                           |
| 25                   | 44.00                          | 44.00                                           | 25                             | 32.75                | 32.75                                           |

### HOW THE DIFFERENCE BETWEEN THE REDUCTION OF MOISTURE AND THE SHRINKAGE IN GRAIN CAN BE DETERMINED.

While these differences vary with the original moisture content and the degree of drying, they can be determined readily by simple calculation.

**Shrinkage.**—To find the final weight and shrinkage on any given lot of grain or other substance which has been dried, the original weight and the moisture content before and after drying being given, the following simple proportion may be used:

Percentage of dry } . { Percentage of dry } . { Original } . { Final  
matter after drying } . { matter before drying } . { weight } . { weight

By multiplying the third term by the second and dividing the product by the first term the quotient will be the final weight.

Therefore, the original weight less the final weight equals the shrinkage.

If the original weight is taken as 100 per cent, which can always be done, the shrinkage found will be in percentage, but if it is desired to express the shrinkage in terms of bushels or pounds the calculation may be made as in the following example:

**Problem.**—What will be the shrinkage in weight on 1,000 bushels of corn if the moisture content is reduced from 25 per cent to 15 per cent?

Dry matter after drying = 100 — 15 = 85 per cent.  
Dry matter before drying = 100 — 25 = 75 per cent.  
Original weight of corn = 1,000 bushels.  
Therefore, 85 per cent : 75 per cent :: 1,000 bushels : final weight.

Completing the proportion by multiplying 1,000 by 75 and dividing the product by 85 the final weight is found to be 882.4 bushels, giving a shrinkage equivalent to 117.6 bushels, or 11.76 per cent. The shrinkage in this case exceeds the reduction in moisture content by 1.76 per cent.

For additional data see Tables II and III.

**Moisture.**—To find the final moisture content of any given lot of grain or other substance which has been dried, the moisture content before drying and the weight before and after drying being known, the following simple proportion may be used:

Weight } . { Original } . { Percentage of dry } . {  
after drying } . { weight } . { matter in original } . {  
 $x$  = percentage of dry matter after drying.

Therefore, 100 less  $x$  equals the percentage of moisture remaining after drying.

The following will serve as an example:

**Problem.**—If 1,000 bushels of grain containing 25 per cent of moisture are reduced to 900 bushels on drying, what will be the percentage of moisture in the dried grain?

900 bushels : 1,000 bushels :: 75 per cent :  $x$ .

Completing the proportion by multiplying 75 by 1,000 and dividing the product by 900, the value of  $x$  is found to be 83.33 per cent, which is the percentage of dry matter remaining after drying. Therefore, 100 per cent less 83.33 per cent equals 16.67 per cent, which is the moisture content of the dried grain.

The grain originally contained 25 per cent of moisture, which was reduced to 16.67 per cent, or a decrease in moisture content of 8.33 per cent as the result of drying. At the same time the weight was reduced from 1,000 bushels to 900 bushels, or a shrinkage of 10 per cent. The shrinkage in weight, therefore, exceeded the reduction in moisture by 1.67 per cent.

For additional data pertaining to moisture see Tables III and IV.

If it is desired to find the original moisture content when the final moisture content and the weight before and after drying are known, the terms of the foregoing proportion in the following order may be used:

Original } . { Weight after } . { Percentage of dry } . { Percentage of dry  
weight } . { drying } . { matter after drying } . { matter in original

Completing the proportion in the same manner as already described and subtracting the result so obtained from 100 per cent will give the percentage of moisture contained in the grain before drying.

### EXPLANATION OF TABLES.

Table II shows the loss in weight resulting from the partial or complete drying of grain having a moisture content below 41 per cent. Thus, if the original moisture content, shown at the top of each column in the body of the table, and the reduction in moisture, shown in the column on the left, are known the shrinkage can be read direct from the table. For example, if the original moisture content of a sample of grain is 19 per cent and the moisture content of the grain represented by such sample is reduced by drying to 15 per cent, involving a loss of moisture of 4 per cent, proceed as follows: Run down the column under the heading "Loss in moisture," at the left of the table, until the figure 4 is reached; follow the line of figures opposite 4 to the right as far as the column headed 19 (original moisture content). The 4.70 per cent in this column is the loss in weight, or shrinkage, which corresponds to a loss of 4 per cent moisture in 19 per cent of grain. Had the original moisture content been 26 per cent the loss in moisture resulting from the drying would have been 11 per cent. In column 26, opposite 11, is 12.94 per cent, which would be the shrinkage if the moisture had been reduced from 26 to 15 per cent as in the case assumed.

Table III differs from Table II in that it shows the loss in moisture corresponding to each unit loss in weight. The method of reading the table, however, is the same.

Table IV differs from Tables II and III in that the final moisture content can be read direct. This table will be of special value to operators of grain driers in that the final moisture content of the grain can be ascertained very closely without making the test, provided the moisture content of the grain before drying and the weight before and after drying are known, not of course taking into consideration any loss due to the blowing out of chaff, dirt, etc. The readings are made the same as described for Table II—i. e., in the column on the left find the number corresponding to the loss in weight; opposite this number in the column indicating the original moisture content will be found the percentage of moisture in the grain after drying. For example, if the original moisture content is 20 per cent and the loss in weight is 5 per cent the final moisture content, as shown in column 20, opposite 5, is found to be 15.79 per cent.

(For Tables II, III and IV, see pp. 73 and 74.)

\*Bulletin 93, Bureau of Plant Industry, U. S. Department of Agriculture, 1907.



Original moisture content (per cent)—

| Loss in moisture. |        | Original moisture content (per cent)— |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|--------|---------------------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                   |        | 1.                                    | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.   | 12.   | 13.   | 14.   | 15.   | 16.   | 17.   | 18.   | 19.   | 20.   | 21.   | 22.   | 23.   | 24.   | 25.   | 26.   | 27.   | 28.   | 29.   | 30.   | 31.   | 32.   | 33.   | 34.   | 35.   | 36.   | 37.   | 38.   | 39.   | 40.   |       |
| Percent.          | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
|                   | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 1                 | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 2                 | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 3                 | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 4                 | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 5                 | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 6                 | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 7                 | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 8                 | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 9                 | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 10                | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 11                | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 12                | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 13                | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 14                | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 15                | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 16                | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 17                | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 18                | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 19                | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 20                | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 21                | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 22                | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 23                | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 24                | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 25                | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 26                | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 27                | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.16  | 1.18  | 1.19  | 1.20  | 1.22  | 1.23  | 1.25  | 1.27  | 1.28  | 1.30  | 1.31  | 1.33  | 1.35  | 1.37  | 1.39  | 1.41  | 1.43  | 1.45  | 1.47  | 1.49  | 1.51  | 1.54  | 1.56  | 1.59  | 1.61  | 1.64  |       |
| 28                | P. ct. | 1.60                                  | 1.61 | 2.00 | 3.00 | 4.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 | 18.00 | 19.00 | 20.00 | 21.00 | 22.00 | 23.00 | 24.00 | 25.00 | 26.00 | 27.00 | 28.00 | 29.00 | 30.00 | 31.00 | 32.00 | 33.00 | 34.00 | 35.00 | 36.00 | 37.00 | 38.00 | 39.00 | 40.00 |
| 29                | P. ct. | 1.00                                  | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11  | 1.12  | 1.13  | 1.15  | 1.    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

Original moisture content (per cent)—

[illegible]



Grain traffic alone would, in the opinion of many members of the Merchants' Exchange, furnish ample outbound business for the New York and St. Louis boat line. The grain shipments, a large percentage of which could be handled by steamer, aggregated 48,602,480 bushels in 1908, says the *Republic*.

St. Louis dealers shipped 1,146,379 bushels of grain, exclusive of grain products, to Atlantic and Gulf ports for export. Under favorable conditions practically all of this traffic could move by water. To the South were shipped 47,364,683 bushels of grain, and a vast quantity of this tonnage could go by boat.

It is figured by dealers that the grain traffic easily can be handled by boat. The railroads now have rates of 12 and 13 cents per 100 pounds from St. Louis to New Orleans. The boat line could obtain a great percentage of this business by establishing a low rate and giving assurances of regularity of service.

Inasmuch as several of the railroads transporting grain to and from St. Louis do not offer satisfactory rates, the boat line has a rare opportunity. While these railroads offer satisfactory rates from St. Louis, they do not give satisfactory rates to St. Louis. By establishing a low rate from St. Louis to points in the South, the boat line can take advantage of conditions and get the outbound traffic.

A chance exists for the boat line to make joint rates, with transit privileges, with several of the railroads operating into St. Louis from points in Illinois, Iowa and Western States. The joint tariff would have the effect of giving the boat line and its friendly steam carriers the haul through St. Louis from points of origin to the final destinations.

Nothing would so gratify the grain dealers of St. Louis as competent boat service between St. Louis and New Orleans. The dealers would quickly accept the opportunity to turn their tonnage over to steamers. They would want, of course, rates to Memphis, Vicksburg, Natchez and other important intermediate points. The final object would be to get rail and water rates and use the intermediate points as distributing centers for interior points.

Grain dealers will be in position to build up heavy trade with Cuba, Mexico and ports in Central and South America, and they gladly will show preference for a boat line making special rates between St. Louis and points in Latin America. The Latin-American business already is large, but it will assume greater magnitude with adequate boat service and satisfactory rates.

In order to protect the public from personal injuries at grade crossings in the state of Washington, the Railroad and Warehouse Commission will issue orders requiring railroad companies to move

grain warehouses and other structures from the right-of-way where such buildings obstruct a view of the tracks from the road. The order will affect houses at Garfield, Prosser, Hatton and perhaps other places.

The following is the report of the Transportation Committee of the Western Grain Dealers' Association to their annual meeting held at Des Moines, Ia., July 14, 1909:

During the latter part of the year 1908 your executive officers conceived the idea of dividing up the work of the Association and placing some of the responsibility on several committees, and at a meeting in January, the committees were appointed, and we beg to submit the following report for the period ending July 1, 1909, concerning matters coming before the Transportation Committee.

Owing to the peculiar nature of a general grain business the matter of transportation is a momentous question to all concerned. There is very little that a grain dealer is concerned in that is not more or less dependent upon transportation. In the territory covered by the Western Grain Dealers' Association the problem of transportation is solved entirely by railroads; not having any means of transporting by water, our business must necessarily be handled by rail; hence, your committee's dealings have been and will be with the railroads.

During the last few years our law makers have seen fit to undertake the regulation of commerce in general and the railroads and shipping interests in particular; and while the legislation may have benefited commercial conditions in a general way, it is questionable whether the farmer is getting more for his grain today, as based on the market price at the terminal markets or the seaboard, than in the good old days of yore; and it is a fact beyond question that the ordinary country shipper knows considerably less about the probable cost of marketing a bushel of grain than he did before our Congressmen undertook to establish tariffs by law.

One of the first propositions to which our attention was called was the matter of railroad leases for elevator sites.

We find that different railroads have different rules regulating the granting of sites for elevators; that the Interstate Commerce Commission has made a few rulings as to side-tracks; and that the several state railroad commissioners have taken a hand in the procuring of sites for different industries wishing to locate along railroad tracks. As far as we have been advised, the railroads have shown no disposition to withhold elevator sites from legitimate grain dealers, but we find that along the same railroad there is a great difference as to the rental charged for these sites, under practically the same conditions and in towns of the same population.

We believe and hold that a railroad charging a grain firm anything more than a nominal rental for an elevator site is showing rank discrimination, for it is a fact known to all that the railroads furnish warehouses and loading facilities for all other kinds of freight shipped over their lines, and we believe that if the grain dealer furnishes his elevator or warehouse to accumulate grain for shipment, practically acting as a railroad agent in transportation matters, the railroads should be satisfied with the freight earnings and anything more than that is unfair.

We have been presented with considerable argument as to the natural shrinkage of grain, many claiming that the moisture would evaporate from a car of grain while in transit, thereby causing considerable loss in weight. We presume that, technically speaking, there is some evaporation, but if the car in which grain is shipped is well coopered and the doors closed (making it practically airtight), we doubt if there are two hopper scales in existence which will register the shrinkage in pounds, if the grain remains cool and sweet; and on grain inspecting No. 4 or better the evaporation from the small amount of grain exposed to the air in the top of a car would be infinitely small; and we would recommend that in filing claims for shortage on the above grades of grain no deductions be made on account of "so-called" natural shrinkage.

Among the various claims against the railroads presented for our consideration by the members of the Association, we find many based on shortages, on which the papers have been returned marked, "Car arrived under the original seals"; and upon thorough investigation we find that the car had sprung a leak in transit, had been set out and repaired without removing the original seals and with no leak apparent to the Inspector at its destination. Our legal advisor holds that it is incum-

TABLE IV.—Percentage of moisture content after drying, the loss in weight and the original moisture content being given.

| Loss in weight. | Original moisture content (per cent)— |        |        |        |        |        |        |        |        |        |        |        |        |        |        | Original moisture content (per cent)— |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |
|-----------------|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
|                 | 1.                                    | 2.     | 3.     | 4.     | 5.     | 6.     | 7.     | 8.     | 9.     | 10.    | 11.    | 12.    | 13.    | 14.    | 15.    | 16.                                   | 17.    | 18.    | 19.    | 20.    | 21.    | 22.    | 23.    | 24.    | 25.    | 26.    | 27.    | 28.    | 29.    | 30.    | 31.    | 32.    | 33.    | 34.    | 35.    | 36.    | 37.    | 38.    | 39.    | 40.    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |
| 1.              | P. ct.                                | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct.                                | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct. | P. ct.</ |



bent upon a railroad to prove that the car did not leak while in their possession; but, of course, this necessitates legal proceedings, which most grain dealers do not care to commence about the few dollars which they might recover for loss of grain. However, we would advise that in this class of claims the railroad company be required to produce their train record, showing the handling of this car; and a close investigation by the shipper will generally develop the fact that the car has been in trouble. The simple fact that a claim has been returned marked "rejected" does not necessarily imply that the claim agent believes that it has no merit.

#### LEAKAGE THROUGH CAR DOORS.

In March, 1909, there was presented to your committee the papers covering a claim filed for grain which leaked through a car door, and we will quote you an opinion written at that time:

"The matter of making claims on grain which has leaked through car doors has been under consideration several times, and after giving the matter a great deal of thought, we have finally come to these conclusions, viz: The railroad is in the transportation business and furnishes equipment for the transportation of grain. When the railroad furnishes this equipment, it is supposed to be in such condition and of such quality that it can guarantee it against break-down before it reaches destination and is delivered. Part of this equipment which the railroad undertakes to furnish is car doors, which are often made of inferior lumber, or even the very poorest kind of culls are furnished, without even being nailed together or fashioned in any manner. The railroad depends upon the shipper to use this poor material to put the car in condition to carry grain, relying on their agents at point of origin and on their trainmen during the transit of the car, to observe and if necessary repair cars that are found leaking or in any way disabled.

There are no rules promulgated by the railroad company as to placing these car doors; they relying on the judgment of the shipper to cooper the cars in the proper manner. On some roads they furnish car doors already made up or fashioned. Often these car doors are made of very brittle lumber, full of dote and knots, making it hard to fit them together so the car will hold coarse grain, much more grain that spills easily. This material is furnished to make a door, which is located in the center of the car, strong enough to hold grain, and in many cases the car is weak in the center, and in heavy switching, it buckles up enough in the center to knock the doors loose. Then when they get a jerk from the other end, they huckle the other way, which pulls one end of the door over.

After studying this matter carefully, we have come to the conclusion that the railroad company is liable for car door leaks, and we believe that they are just as responsible for the grain that leaks out of a car door as they are if it leaks out over a drawbar, and that the burden of proof is on the railroad to show that the shipper slighted his work in cooperating the car or left it weak from malicious intent.

Another pertinent reason why we believe that railroads are liable for leakage through car doors is that they have published a tariff, or ruling, that they will only allow so much to pay for material for coopering cars, which is so little that if the shipper only expends the amount of money allowed the doors must necessarily be weak; and we believe that if he does expend the amount of money allowed by the railroad, honestly and conscientiously, and it does not make the doors secure, the railroad is responsible for the defects.

#### GIVING NOTICE OF ARRIVAL OF CARS.

Our attention has been called to a claim which involves a situation rather peculiar but one altogether too common. A car of grain arrived in Chicago, and the shipper's agent was not notified for three or four days; consequently, the car was not sampled and sold. In the meantime the market had declined 2 or 3c a bushel and he filed a claim to recover from the railroad company. We are not well advised as to the legal status of such a claim, but in equity we believe the railroad company should be responsible to this shipper for the difference in price between that which he would have received, had the car been sampled and sold upon arrival, and what he did receive when it was sold, as it was purely their neglect in not reporting the car; and according to the demurrage rules, had they reported the car upon its arrival and the market been advancing so that the receiver thought best to hold this car on track three or four days, in order to receive a better price for it, the railroad surely would have asked him to pay at least \$1 per day for the use of the car.

#### DETERIORATION OF GRAIN CAUSED BY DELAY IN TRANSIT.

Many claims are presented based on deterioration of grain caused by delay in transit. Some three or four years ago there was a heavy congestion of corn at several of the junction points of the Trunk Line roads, which occasioned delay of cars of corn in transit from ten days to six weeks. This being early in the year and the corn soft, most of it be-

came hot and depreciated in value. After considerable parleying the railroads paid those claims; and we thought at that time the rule had been established and acknowledged by the companies that they were liable for any loss occasioned in this manner, but of late we find that some of the claim agents have forgotten the lesson they should have learned at that time. We believe and recommend that claims of this kind should be collected, even at the end of a lawsuit. All railroad traffic men are aware that corn is a perishable product to a certain extent and to our personal knowledge is recognized as such by several freight men; so it is "up to them" to furnish service adequate to protect the kind of property they are transporting.

#### SEAL RECORDS.

One of the greatest fakes that has ever been imposed upon the grain shipper is the ordinary so-called "sealed record," which the average terminal road will assure you is accurately kept; and in cases where the seals on a car are called in question, the claim department will assure you that the seals were the same at the elevator where the grain was delivered as they were when the car was resealed after inspection on the hold tracks, possibly located twenty or thirty miles from the elevator where the grain is unloaded. We well know that the seal had the same mark or number; but as the railroad use duplicate seals, this car might have been opened a dozen times in the three or four days consumed in getting it to where it was to be unloaded; and owing to the amount of grain

A few days ago we had a complaint from one of our members coming under the second paragraph of Section 3. Last spring he sold a car of corn for June shipment at the price prevailing at that time, plus a reasonable carrying charge (he having the corn in store), and when delivery day came, this corn was loaded and intrusted to the railroad for delivery, corn in the meantime having advanced ten cents per bushel. The railroad wrecked this car and now stands on the implied contract, as set forth in the second paragraph of Section 3, and offers to pay only the invoice price, while this dealer, being obliged to furnish a car of corn to fill his sale, must now go to the market and buy it at the increased price, thereby incurring a loss of ten cents a bushel. We mention this case that the members may have an opportunity of discussing same.

Another interesting topic for discussion would be, "Erroneous quotations given out by accredited agents of the railroad and business closed on that basis."

While we have held a few meetings and put considerable time and thought on these various matters of transportation submitted for our consideration, yet we feel that the province of our committee to date has been purely advisory.

It would appear that there should be some provisions made in the by-laws of the Western Grain Dealers' Association covering the standing and authority of the several committees; and we would ask that this matter be taken up at this meeting



PREMISES OF THE FOUKE MILLING AND GRAIN CO., TEXARKANA.

pilfered out of cars in these terminal yards, we believe the railroad company should be held responsible for the shortages; and we recommend that all claims based on shortages, where the seal record is in question and where the railroads use duplicate seals, be vigorously prosecuted. This will convince Mr. Traffic Manager that he had better use seals consecutively numbered; then with an accurate seal record, he will have something on which to base his defense.

#### TEAM TRACK SCALES AT ST. LOUIS.

On October 22, 1908, at Mason City, Ia., there was held a meeting of this Association, and the matter of weighing facilities for the team tracks of St. Louis and East St. Louis was thoroughly discussed. The result of this discussion was a set of resolutions drawn up and indorsed by that meeting, presented to the secretary of the Merchants' Exchange and to John Dower, Supervisor of Weights at St. Louis, in regard to which I presume you are well advised. This matter has been handled very largely by your secretary, but the attention of your transportation committee has been called to it on several occasions; and we wish to indorse what has been done. From some correspondence which has passed between your secretary, Mr. Wells, and the freight traffic manager of one of the principal roads carrying grain from territory covered by your association to St. Louis and East St. Louis, we are pleased to note that he takes the suggestions kindly and seems to be willing to do his part; and we would recommend that this association use all proper and available means to bring this project to a successful termination.

#### UNIFORM BILL OF LADING.

The Uniform Bill of Lading is still under discussion by the Interstate Commerce Commission and the representatives of the railroads, and is a matter of considerable interest to the grain shippers, although it seems to be much short of giving universal satisfaction.

and the duties of the Transportation Committee be well defined. Respectfully submitted,

O. A. TALBOTT,  
Chairman of the Transportation Committee.

#### FOUKE MILLING AND GRAIN COMPANY.

The Fouke Milling and Grain Company of Texarkana, Ark.-Tex., is capitalized at \$20,000, of which \$19,000 is paid up. The company was organized in September, 1908, to succeed the Fouke-Shepherd Grain Company, and has the following officers: President, Geo. W. Fouke; vice-president, Allan Winham; secretary and treasurer, Chas. Staiti; manager, M. M. Laws.

The company has a warehouse capacity of 400 cars, an elevator capacity of 30,000 bushels, and is equipped to turn out 4,000 bags of corn chop and 200 barrels of meal daily. Electric motors are used for power. The company handles flour, hay and all kinds of feedstuffs, its territory embracing Arkansas, Louisiana and Texas, and Texarkana being the gateway, exceptionally good rates are enjoyed.

Texas corn is always first on the market, being matured and ready for shipment three months before a carload can be taken out of the corn belt. Texas corn also goes to market in better condition than the product from any other locality. The crop is generally fully matured by the latter part of July or the first of August, and cures on the stalk in the hot summer sun, so that it is ready when gathered to go directly into a ship's hold for export.



[For the "American Elevator and Grain Trade."]

### THE OFF-GRADE MANAGER.

BY GUIDO D. JANES.

Neeburg, the general manager of the E. & A. Railroad, was quite an astute grafter. Before becoming a general manager he was a sign painter, and just to keep in practice after his appointment he lettered a whole lot of the grain cars 50,000 pounds' capacity when in truth the fifty ought to have been forty.

"It is much easier to make a five than it is a four," he remarked to the superintendent of the car department after concluding the job; "and in case any of those grain dealers bring us into court I can buy the jury with a five instead of a four."

"Good scheme," replied the car man. "You will please the directors and make the stock quotations on this road go up higher. You're all right."

"Thanks."

But that was just a starter; for when the board of directors had their annual meeting and decided to water the stock, Neeburg was given the tip to run in more graft and diplomacy on the road. So Neeburg took the said tip and, aided by the superintendent of the car department, chopped trap doors in the roofs of the grain cars; and then they smiled profusely.

The result of this was that when the Grundy and Adams County dealers shipped their wheat to the Bridgeport Flouring Mills a lot of cinders from the locomotives strolled into the wheat-laden cars, after which the said cars were weighed at the nearest track scales, and the owners of the grain had to come across with more coin to pay for the cinder transportation. In this way the fuel bill of the road was paid for.

Naturally, this produced a lot of trouble and worry, as the millers at Bridgeport, upon finding so much off-grade grain from Adams and Grundy counties, criticized the grain men in that locality quite severely.

One day, though, Sol Gills of Ducktown scratched his head and smiled. Yes, he did this when he found out what Neeburg was doing. So he went

and all the cinders I find therein I'll weigh and measure and make out a bill against you. This I'll hand over to the claim agent. Then, too, when I find the painted capacity on your cars too high, I'll shake my fist at you. You are bleeding the shippers."

"No, I am not; 80 per cent of our cars are painted all right, and as a majority rules on our road, the 20 other per cent are all right, too. You cause me to smile."



"WHAT'S THE MATTER?"

"Well, I want to know, Neeburg—will you get off your high-horse?"

"No."

"Very well, then." And Sol left.

Yes, he left and when grain over the E. & A. road began to reach his elevator, he got busy with elevator legs, conveyor belts, grain cleaners, etc., storing it away, after which he went to the dust house, and found therein a lot of dust. Eighty per cent of it was cinders.

"As I thought. Now I'll bring cash into the dealers' pockets over in Grundy County. See if I don't. I'll go and tell the Railroad Commission."

So he went over to the Commission that happened to be in session in the Federal building, and butted into their deliberations. He found Neeburg there, too.

"What's the matter?" asked the chairman, upon seeing Sol saunter in.

"Well, Neeburg is a grafter and an all-around chump. He is paying dividends on watered stock by throwing cinders from his engines into the grain cars and then charging so much per cwt. for it. In other words, he has holes in the roofs of the grain cars, so that more freight of a cinder nature may enter. In this way he pays his fuel bill."

"Honest?"

"Yes."

"He is the worst liar I ever heard of," put in Neeburg, quite sore.

"No, I am not," laughed Sol. "Here is the proof." And he produced from his pocket a handful of cinder grain.

"The evidence is against you," remarked the chairman after examining the said grain. "Patch up your cars, Mr. Neeburg; and do the square thing by the grain dealer, and label your cars correctly, or I'll have you legislated against."

"All right," replied Neeburg, crying: "I feel quite contrite."

"I am glad you do. Now go and lead a better life."

"As for you, Mr. Gill," he added, addressing Sol, "you are the noblest Roman of them all."

"Thanks."



LETTERING THE CARS.

to work and built an elevator at Bridgeport, and after interesting all Adams and Grundy County dealers in the enterprise, installed in his place a grain cleaner with 3,000 bushels' capacity per hour and other contrivances too numerous to mention. After doing this he called on Neeburg and carried on a talk with him.

"You are quite astute," Sol began; "but hardly enough to run you. When you haul the wheat over your road to my receiving pits, I'll clean the grain

### THE YELLOW BERRY PROBLEM.

One of the most serious problems which the wheat growers of the Kansas hard wheat district have to contend with is that of the so-called "yellow berry," and H. F. Roberts, M. S., Botanist of the Kansas State Agricultural College, and G. F. Freeman, B. S., Assistant Botanist, have been investigating the subject with a view to arriving at the knowledge of what causes "yellow berry" and whether or not it can be prevented. The results of the preliminary work have been published in the form of a bulletin, from which the following data is taken:

The wheat of this region produces normally a hard, flinty, translucent grain of medium size and of a clear dark reddish-amber color. By the term "yellow berry" is meant the appearance, in wheat of the above description, of grains of a light yellow color, opaque, soft and starchy. These opaque yellow grains, constituting what are called the "yellow berries," may have this character throughout; but sometimes from a small fraction to half of a grain will be yellow and starchy, while the remainder of the kernel will be hard, flinty and translucent. The difference in color between the flinty grains and the "yellow berries" is due to the difference in the structure and contents of the cells of the endosperm.

The yellow berry may possibly be regarded as an imperfect product, in which the spaces in the cells which are normally filled with proteids (gluten) contain merely water, which drying out with the ripening of the kernel, leave air spaces which are responsible for the opaque appearance of the kernel. In addition to this fact is the further one that per unit of volume of the yellow berry kernel there may be a smaller amount of starch than in the flinty grains, on account of the greater size of the individual starch grains. From the standpoint, therefore, of both gluten and starch, the yellow berry is probably an inferior kernel, and from the economic standpoint it may be regarded as a degenerate product.

It should further be emphasized that the bleached opaque grains, due to weathering, are not "yellow berries." In weathered kernels the grain has an opaque and rather dirty grayish-yellow aspect, which appearance affects the grading of the grain adversely, but is not necessarily associated with an inferior condition of the kernel, although such frequently is the result of exposure to the weather.

This distinction between weathered grains and yellow berry has been dwelt upon, because, to judge from the literature upon the subject, much confusion concerning these characters exists, not only among farmers but also among experiment station men.

The yellow berry, then, appears to be distinctly a physiological growth product, due to certain conditions thus far not clearly analyzed or satisfactorily explained in any of the experiment station publications.

The degree of correspondence that there may be between the particular kind of starchy grain appearing in hard wheat and known as "yellow berry," and the ordinary soft and starchy wheats proper of the Middle States and the Pacific Coast is not known. So far as the present meager physical data admit of comment, it would appear that the starchy wheats of the Pacific Coast, and to a less degree the starchy wheats of the Middle and Southern States, average somewhat higher in pounds per bushel than the hard winter and spring wheats. Whether the data available will be substantiated by more rigid methods of determination is uncertain. Whatever may be true of the soft wheats of the Middle and Southern States in this respect, concerning which there is the most doubt, it certainly appears true that in some parts of California soft, starchy white wheat grows which is heavier in pounds per bushel than the hard winter and spring wheats.

Now the yellow berry does not resemble this type of soft wheat in respect to weight, since the yellow berries, in weight and specific gravity, fall below the flinty kernels of the same variety. The question therefore remains open, to what extent the yellow berry is a varietal trait, and to what extent merely a condition brought about by seasonal in-



fluences, whereby it can be considered a degeneration product, containing not only, as is known, less protein than the flinty kernels, but also less starch per unit of volume.

The latter point is an interesting and critical one, upon which Professors Roberts and Freeman are now working. There are data on hand which support both views of the nature of yellow berry, but they are too incomplete to warrant any statement whatever at the present time. The essential thing, from the practical standpoint, is to discover whether pure stocks of wheat can be found which produce constantly a minimum amount of yellow berry in the hard wheat region in seasons and localities in which the yellow berry ordinarily occurs.

While the investigations at the Kansas station have been quite extensive and have resulted in much valuable data, they were only preliminary to a very thorough and extensive research into the whole subject of yellow berry by Professor Roberts, who is now studying the problem from the standpoint of the microscopic structure of the grain, its chemical composition, physical character with respect to hardness, specific gravity, etc., and also the problem of the extent to which the yellow berry is hereditary.

### MINNESOTA GRADES.

The joint Minneapolis and Duluth Grain Inspection Boards (Board of Appeal) met on August 3 at Minneapolis and established the grading rules for crop of 1909, in effect August 16. The rules are substantially the same as in force for crop for 1908, except that the inspection department will allow hereafter a dockage on oats and barley. Coarse grains have never been docked heretofore, except rye, but in the future the amount of dirt contained in a shipment of oats or barley may be estimated and allowed for by buyer and seller.

New grading rules were made for speltz as follows:

No. 1 Speltz—No. 1 Speltz shall be white, dry, sweet, sound, clean and free from other grain, and shall weigh not less than 37 pounds to the measured bushel.

No. 2 Speltz—No. 2 Speltz shall be dry, sweet, sound, reasonably clean and practically free from other grain, and shall weigh not less than 36 pounds to the measured bushel.

No. 3 Speltz—No. 3 Speltz shall be all speltz that are merchantable and warehousable, and not fit for the higher grades.

A new grade of corn also was established, to be known as No. 4 yellow, which "shall include all corn not wet and not in heating condition that is unfit for No. 3 yellow."

Those present at the meeting were the Railroad and Warehouse Commission by Judge Ira B. Mills, C. F. Staples, A. C. Clausen and Charles E. Elmquist, T. B. McManus, H. M. Gray and H. P. Bjorge of the Duluth Board, and A. F. Evenson, W. F. Kelso and S. P. Thorson of the Minneapolis Board; also Chief Inspector F. W. Eva of St. Paul, and Inspectors J. N. Barnard of Minneapolis and H. E. Emerson of Duluth.

No deliveries of cash oats have been made this month and it is hard for the oldest oats trader to remember when such a similar situation prevailed, with a stock of over two million bushels here. There are a lot of July oats bought at 55c which have not been delivered.—Journal of Commerce, New York.

Samples of new corn from Oklahoma and the Atchison territory were received at Kansas City on August 9. That from Oklahoma was dry enough to feed. From farther north the samples were yellow and indicated the crop would be matured with good weather in ten days to two weeks. It is expected that new corn will be delivered on September contracts at Kansas City.

Chicago's status as a wheat market will be materially enlarged this year by its action of last year in admitting hard winter wheat to the contract grade without penalty. This makes the entire Kansas and Nebraska crops tributary to this market and puts them on a much better competitive basis than they previously enjoyed. It also means that the speculative buyer has a larger supply to reckon with.—Record-Herald.

### INTERNATIONAL INSTITUTE OF AGRICULTURE.

The International Institute of Agriculture at Rome is a dream of David Lubin of California realized, at least in part. For the picture herewith is material evidence that the Institute has "a local habitation and a name"—"the wild Yankee," as he was called in France, when he first proposed his institute, has "squared the circle" in so far that forty-eight governments have agreed to push his idea along.

The building, of which a portion of the front only is shown, is one of the most sumptuous public palaces in Europe, and was erected by the King of Italy out of his private purse. Its exterior, as D. C. Lee writes from Rome to the Country Gentleman, is of marble and brick, and the interior of marbles and polished woods, the walls of the larger rooms being covered with tapestries and paintings illustrative of rural life. The entire edifice is constructed and furnished in regal style. Amid this elegance, the permanent workers connected with the Institute will receive daily from the various governments telegraphic and cable reports in



INTERNATIONAL INSTITUTE OF AGRICULTURE.

code regarding the condition of crops, realized and prospective. Here will be made up the "world summary," or international crop reports, to issue which promptly in a reliable form is the chief object of the Institute.

It is not necessary to repeat here the history of the difficulties encountered in organizing the Institute; but it has been organized, and the letter of Mr. Lee, referred to above, fully explains the status of the Institute at this time. He says:

The work of the permanent committee completely demonstrates the practical utility of the institute. A very delicate and arduous work was given to it. The limitations imposed by the convention of 1905 seemed to some to reduce the institute to a dead-and-alive statistical bureau. Its governmental relations seemed to absolutely forbid its occupying any position of influence in the commercial life of the future. Organs of the speculative trade in the United States have been declaring this to be the only future open to the institute. It is just here that the members of the permanent committee have shown every high ability and a complete grasp of the situation. They have evolved a plan of organization, a scheme of operation and a budget, which disclose possibilities far vaster than the terms of the original convention seemed at first glance to permit.

The chief evils which the Permanent Committee have kept in mind, and which they have planned to ameliorate are well stated by Secretary McQuirk of the Liverpool Corn Trade Association: "At the present time there are no reliable beacons to guide those who are engaged in the trade and manufacture of agricultural products, and merchants and manufacturers are consequently subjected from day to day and from hour to hour to fluctuations, oftentimes violent, in the prices of raw materials, brought about by contradictory and unreliable re-

ports emanating from interested or ill-informed sources."

This organization aims to make such nefarious operations impossible. It may be well to suggest the ways it is expected that this will be effected:

1. That Institute will collect by cable and telegraph, as well as by post, from the various states that adhere to it, statistical facts regarding the condition of crops, both realized and prospective.

2. It will interpret and analyze these reports immediately and deduce conclusions and summaries from them according to a uniform system.

3. As promptly as possible, at regular and irregular intervals, it will publish and disseminate this information on the world's supply of corn, cotton, silk and other staples (animal products as well), the stock on hand and the condition of the growing crops.

4. The producer will thus be able to form an opinion of the value of what he has to sell. The consumer (manufacturer as well as dealer) will be able to judge what will be a fair price for what he wishes to buy. Authoritative statements of the world's crops, when speedily and generally disseminated, will keep the producer from getting, and the buyer from paying, either too much or too little for the products of the soil. In other words, steady prices will result.

5. When spasmodic fluctuations in prices no longer recur—because (a) ignorance as to the qualitative or quantitative value of the product no longer exists, or (b) interested speculators cannot any longer get people to believe their romantic tales—the corn and the cotton speculator as such will disappear.

The Institute will make lying unprofitable. Nobody will pay for the lie when the truth can be had for nothing. The truth will make freer the agricultural world market, and permit the producer to meet the demands of the buyer according to natural laws. The speculator who then will not be able to make (or lose) fortunes by bulling and bearing the market in staples may turn his energy to buying and selling on commission. From this he will reap a steadier income, and his bread will come to his mouth untainted with anybody's loss.

The statutes adopted by the General Assembly are the constitution of the new Institute. They segregate its various functions into three divisions: (1) the office of the Secretary-General, including administration, employees, etc.; (2) the Bureau of Statistics and Crop Reports, including Diseases of Plants; (3) the Bureau of Economic and Social Institutions, including Wages for Farm Labor, Agricultural Insurance, Co-operation, Loans and Credit, etc. At the head of each division is a member of the Permanent Committee chosen for his special fitness to administer this particular work. With each division head are associated as a commission other members of the committee, all of whom are to be resident at Rome.

The endowment, for the palace of the Institute alone, consists of two royal estates set apart by the King. Their annual income is over \$60,000. The Institute itself is not endowed except as provided in the convention of the powers. Each nation can decide in what class it will adhere. If a power wishes to be in the first class, and have five votes in the deliberations, it must subscribe annually five units of assessment, each unit being \$500. If it prefers to have but one vote, its assessment is only \$500. For example, the United States adhering as a first-class power obligates itself to pay \$2,500 annually. The budgets for 1909, the first year of experimentation, and for 1910, when it is expected the work will be well under way, provide for an annual expenditure of over \$150,000, which is about equally divided between payments to employees and expense of administration.

### SAMPLES NOT UP TO GRADE.

Type samples of the new winter wheat as forwarded from Chicago and Kansas City to Liverpool have failed to come up to the standard of the latter market, which refused to grade either of them contract. The type samples adopted by the grain committee at Chicago were probably a little lower in quality than last year. They were made up from the early run of wheat, which was generally damp, but which promised to improve with continued dry weather. The rejection of the American standard caused quite a flurry at Liverpool among those who had sold for December delivery. After the flurry had subsided, however, the trade came to a more far-sighted view, which indicated that there would be a lessened market for American wheat.—Record-Herald, August 5.

The first car of new oats to reach Boston this season arrived on August 2 from Cleveland, Ohio, consigned to Noyes & Colby of the Chamber of Commerce. The oats were in excellent condition, weighing 38 pounds, and sold at 56 cents per bushel.

The first arrival this season of new wheat at Philadelphia was on July 22. It was grown in Maryland, loaded on a barge at Locust Point, Baltimore, and was towed to Philadelphia through the Chesapeake and Delaware Canal. The wheat was for export and could be brought by barges through the canal cheaper than by rail.



## FIELD SEED SECTION

### ORDER RE SEED SAMPLES.

The U. S. Treasury Dept. has issued the following order (T. D. 29859) to officers of the customs.

"At the request of the Secretary of Agriculture, it is directed that until July 1, 1910, 2-ounce samples of all importations of 100 pounds or more of grass, clover, and forage-plant seeds be prepared at the earliest practicable date after entry, and forwarded to the Seed Laboratory, Department of Agriculture, Washington, D. C., labeled with names and addresses of consignors and consignees, name of seed as given in the invoice, and quantity of the consignment."

[Bul. 53, Okla. Agr. Exper. Station.]

### ALFALFA SEED IN OKLAHOMA.

BY L. A. MOORHOUSE, AGRONOMIST,

AND

W. L. BURLISON, ASSISTANT AGRONOMIST.

[Concluded from May Number, p. 600.]

Weeds destroy the beauty and attractiveness of the farm and possibly no other condition is a better index of the lack of progressiveness or the prosperity of the community than their presence or absence. Weedy roadsides and weedy cornfields are indicative of shiftless methods of farm practice. Noxious pests which are sometimes found in our alfalfa fields show that due care was not exercised in the selection of pure seed. The injury which results through the growth of weeds may be outlined as follows:

*First*, weeds require a large amount of moisture. In many instances fields are covered with a dense mat of weeds which have a considerable leaf surface. Under such conditions the moisture which passes from these leaves is equivalent to several inches of rainfall. Where a portion of the soil moisture is taken up by a noxious plant, the supply for crop use is lessened and the yield of grain or forage is curtailed thereby.

*Second*, it frequently happens that weeds smother and choke out entire fields of alfalfa as well as other farm crops. Aside from this feature, weeds prevent the sunlight from falling upon the soil, and this hinders the best physical and chemical actions so essential to the liberation of plant food.

*Third*, all plant life requires food. Where there is a heavy growth of weeds, several tons of material are produced. In such cases a large amount of plant food is removed from the soil by the plants which are out of place and the useful crop is compelled to make its growth on a lower percentage of the essential elements.

*Fourth*, insects, such as chinch bugs, live through the winter under cover of weeds which are left standing in the fields and along the roadsides. Greater losses may accrue the coming season through the protection which is afforded by such rubbish.

*Fifth*, some weeds are poisonous, though such plants occur very infrequently in alfalfa.

*Sixth*, a high percentage of weed seeds renders the crop almost valueless for commercial purposes. This is an especially important point in sections where alfalfa seed production is contemplated as a part of the farm business.

*Eradication*.—All weeds fall into one of three classes; annuals, biennials, or perennials. Annuals are those which live one year, produce seed and die. Biennials grow from seed, but do not produce seeds until the second year at which time growth ceases. Perennials grow from the seed or root stalks and may live year after year without producing seeds. Without some knowledge as to what class our most troublesome weeds belong, eradication is made more difficult. Those which belong to the first and second group may be held in check or even exterminated by not allowing the seeds of such plants to mature. If biennials are to be eliminated the first year, it will be found necessary to destroy the plant, and in some cases, remove the roots from the soil. Perennial plants are very troublesome as they spread from the seeds and from the roots—the seeds may not be allowed to mature and

at the same time, this plant may spread rapidly by means of its underground roots. In such instances the farmer must destroy the entire plant instead of simply preventing it from maturing its fruit. A large number of plans have been outlined for the destruction of weeds by means of sprays or other chemicals, but as yet, the most effective means of exterminating undesirable plants is judicious and persistent cultivation.

The following table indicates the species of weed seeds found in samples tested at this Station, their habit of growth and the percentage of samples in which they occurred:

| Species—                                                         | Per Cent<br>of Samples<br>in Which<br>Each<br>Occurred. |
|------------------------------------------------------------------|---------------------------------------------------------|
| Setaria viridis (Green Foxtail), annual.....                     | 27.0                                                    |
| Setaria glauca (Yellow Foxtail), annual.....                     | 29.0                                                    |
| Plantago lanceolata (Plantain), biennial or perennial.....       | 24.0                                                    |
| Panicum sanguinale (Crab grass), annual.....                     | 18.0                                                    |
| Chenopodium album (Lambs Quarter), annual..                      | 16.0                                                    |
| Amaranthus hybridus (Pigweed), annual.....                       | 19.5                                                    |
| Panicum capillare (Old Witch grass), annual....                  | 11.0                                                    |
| Centaurea piciris (common name not given), annual.....           | 11.0                                                    |
| Salsola Tragus (Russian Thistle), annual.....                    | 7.0                                                     |
| Eruca sativa (Rocket), annual.....                               | 5.0                                                     |
| Rumex crispus (Dock), perennial.....                             | 5.3                                                     |
| Panicum Crus-galli (Barnyard grass), annual....                  | 4.3                                                     |
| Daucus Carota (Wild Carrot), biennial.....                       | 3.6                                                     |
| Malva rotundifolia (Low Mallow), annual or perennial.....        | 3.9                                                     |
| Trifolium repens (White Clover), perennial....                   | 2.4                                                     |
| Polygonum punctatum (Dotted Smartweed), annual or perennial..... | 2.4                                                     |
| Polygonum Persicaria (Lady's Finger), annual..                   | 4.0                                                     |
| Paspalum setaceum (Paspalum) perennial.....                      | 1.9                                                     |
| Carduus arvensis (Canada Thistle), perennial....                 | 1.6                                                     |
| Carduus lanceolatus (Spur Thistle), biennial....                 | 1.4                                                     |
| Trifolium pratense (Red Clover) perennial.....                   | .9                                                      |
| Medicago lupulina (Trefoil), annual.....                         | .9                                                      |
| Centaurea Jacea (Rayed Knapweed) perennial..                     | .9                                                      |
| Cuscuta arvensis (Dodder), annual.....                           | .4                                                      |
| Linaria Linaria (Yellow Toad Flax), perennial..                  | .4                                                      |
| Lepidium Virginicum (Pepper grass), annual....                   | .4                                                      |
| Rumex Acetosella (Sheep Sorrel), annual or perennial.....        | .4                                                      |
| Prunella vulgaris (Self-heal), perennial.....                    | .4                                                      |
| Plantago Rugelii (Rugel's Plantain), perennial..                 | .4                                                      |
| Lolium perenne (Italian Rye), perennial.....                     | .4                                                      |
| Agrostis alba (Red Top), annual or perennial....                 | .4                                                      |
| Chrysanthemum Leucanthemum (Ox Eye Daisy), perennial.....        | .4                                                      |

Green and yellow foxtail, plantain, lambs quarter, crab grass, pig weed, thistle (Centaurea piciris), and old witch grass occurred in the largest number of samples. The four grasses mentioned are very common in Oklahoma, and are widely distributed over many sections. Plantain (buckhorn or rib grass) is the only noxious weed seed which was found in a large number of samples. It is not common in this state, although during the last two years it has been distributed over a large area of Oklahoma in alfalfa seed which was shipped from northern sections.

Russian thistle appeared in 7 per cent of the samples examined. This weed is not found in all of the counties of Oklahoma. Some of the northern and western areas have reported that this weed is giving trouble. Canada thistle is less prevalent in alfalfa seed, and it is hoped that this figure will remain low as the plant is considered to be more or less of a noxious character. Centaurea piciris and rocket are two new weeds which are attracting some attention at the present time. The samples of alfalfa analyzed during the last season are the only ones which have contained seeds of either of these weeds. It remains to be seen whether or not they are very injurious weeds. Dodder is the worst pest known to infest our alfalfa fields, but seeds of this pest have been found in only one sample of alfalfa during the past two and one-half years.

### GRASS SEED CROPS OF RUSSIA.

The area under clover, lucerne, timothy and other grass seeds in Russia, says Beerbohm's, has increased in some regions to the extent of 30 to 50 per cent over the average, and to 15 to 20 per cent over last year. Prospects in the principal regions are unsatisfactory. Clover has suffered in the Baltic, Northwestern and Polish provinces, as it was damaged in the winter, and the cold, dry spring has completely ruined it. In the southern region lucerne was scorched, and the first cutting gave a meager yield. In the central agricultural region clover, timothy and vetch are in good condition. In the industrial region, where clover and timothy are

chiefly cultivated, the maturing is favorable, and an early harvest is expected. In the northeastern region red clover promises an abundant harvest. In the southwestern and Little Russian provinces, clover and Esparto are quite satisfactory.

### THE VITALITY OF SEEDS.

One occasionally hears of the remarkable vitality of seeds, says Milling, Liverpool, and a rather interesting example thereof (which can be seen by anyone who has the permission of Lord Ravensworth) occurs in the park near Low Fell. As one is more apt to be convinced by sight than by tradition, it may be mentioned when the foundations of the Dunston Flour Mill were being excavated, there were unearthed a number of hazel nuts, which it was calculated must have been there at least 100 years. By way of experiment one of them was planted in Ravensworth Park, and has now grown into a flourishing tree.

### ALFILARIA SEED EXPERIMENTS.

The U. S. Forestry Service in connection with the Bureau of Plant Industry has been conducting a series of experiments in the reseeding of overgrazed areas upon the National Forests in the West.

Among other important forage plants selected for experimental work is the common alfilaria (*Erodium cicutarium*) of the Southwestern desert country. This forage plant grows all over the deserts of southern California, Arizona and New Mexico, and furnishes one of the best plants for fattening live stock, especially sheep, known to the stockmen. It grows in the early spring when green feed is most desirable and in a few weeks will cover the desert with a rich green blanket until it looks almost like an alfalfa field. The plant generally reaches a maximum height of from eight to ten inches inside of six weeks, and in six weeks more has all died down and blown away leaving the ground bare as a floor. The seeds of this plant have been carried from California, in the wool of migrating sheep, into adjoining states, but while it will grow at high altitudes, it does not reach any great height above an elevation of 3,000 feet.

### THE FANNING MILL FOR SELECTING SEEDS.

It has generally been assumed that the separation of the light-weight and small grains from seed wheat and oats would result in an improvement of the crop grown, both in quality and quantity. Experiments at this station covering the crop of eight years only partially support the theory, the yields of Turkey red wheat from the heaviest heavy wheat giving an average yield of only 32.2 bus. against 32.1 for the lightest light seed, while the weight of the grain from heaviest heavy seed (six crops) was only 56.5 lbs. against 57.3 lbs. for lightest light seed and 56.8 lbs. for ordinary. Tests of Big Frame wheat showed similar results. The first two years of the experiments the "lightest" seed produced least, the "ordinary" was next in yield, and the "heaviest" yielded best; afterwards, however, the results varied from year to year, so that the average for the eight years did not show any marked advantage for either grade of seed.

At the Ontario Agricultural College, however, the results from selected seed have been uniformly larger, and better yields, both of cereals and root crops, have been secured from the larger seed; but the seeds for these experiments at this station were uniformly selected by hand and not by the fanning mill. In the United States, however, "where continuous selection has been carried on for more than two years the data do not indicate any advantage in favor of heavy or large seed. It should also be noted," continues Mr. Montgomery, "that in most of the experiments the comparison has been made of very heavy, or very large, seed with small or shrunken seed, rather than of the large seed with the original stock of seed not so selected. It is easy to conceive that differences might be obtained in the former case, if wide extremes were selected when no apparent difference might be

\*Compiled from a paper entitled "The Use of the Fanning-Mill for Selecting Seed Wheat and Seed Oats," by E. G. Montgomery, in Neb. Agr. Exp. Sta. Bulletin 104.



found in the latter. To compare the selected seed with straight, unselected stock is the only practical test."

Summarizing the results of many station tests with the selection of seeds by the fanning mill, the Nebraska Bulletin says:

"The use of heavy seed wheat, as separated by a fanning-mill, when compared with light of un-separated seed, has not resulted in improvement in either the yield or the quality of grain.

"As every wheat plant contains both heavy and light seeds, the fanning mill gives almost the same kind of wheat, so far as inheritance is concerned, in the light wheat as in the heavy.

"The discussion in this Bulletin refers to the permanent results which may be expected from the use of the fanning mill and in no way discourages the use of the fanning mill or screen for removing obnoxious weed seeds; also, where a large proportion of the seeds is shrunken, miniature or damaged, it will no doubt increase the following crop to remove the poor seeds.

"The use of heavy seed oats as separated by a fanning mill has not given increased yields when compared with unseparated or light seeds."

#### DISSEMINATING PURE SEEDS IN WISCONSIN.

The annual report of Director H. L. Russell of the University of Wisconsin Experiment Station, among other things says.

The propagation and dissemination of pure-bred seed grains have been assiduously continued by the Agronomy Department. Members of the Experiment Association have aided greatly in this work, and Professor Moore estimates this year that one-fourth of the oats now grown in the state is of the Swedish Select type, one-third of the barley is of the Oderbrucker or Manshury varieties, and about one-third of the corn now grown is from pure-bred seed. Over a thousand corn centers have been established this year where growers are propagating selected seed secured from the Station. This work has been pushed not only with reference to corn, but also with the smaller grains, and it is confidently expected within a comparatively short time that selected pure-bred varieties will take the place of the mixtures of varieties that are now used for seed purposes. In the matter of barley alone, this is a matter of the greatest import, as the value of the crop for certain special purposes, such as brewing, depends in a large measure upon its uniformity, and brewers are glad to pay a considerable advance over the market price of the grain to secure a type that is absolutely uniform in germinating quality.

#### COLLEGE BRED SEED WHEAT IN KANSAS.

Prof. C. S. Knight in July made an automobile tour of some 80 farms in 17 counties of the Kansas hard wheat belt, on which was growing wheat from the improved seed distributed a year ago by the Kansas State Agricultural College at Manhattan. About 5,700 acres were examined of which only about 2,000 were considered suitable for listing as having good seed for sale.

The seed everywhere produced better than the ordinary seed, but the grain on the 3,700 acres was vitiated by volunteer wheat and rye. Some of the best acres will yield 25 to 30 bushels, but the average was probably not over 15 bushels.

As to the quality of the new grain as seed for 1910, Prof. Knight found that many farmers were careless of the necessity, in growing improved wheat for seed, to keep the strain pure; they often planted new seed on old wheat ground, thus allowing it to become mixed with volunteer wheat the first year. This mixing of varieties causes the wheat to deteriorate in yield and quality. To maintain the good qualities of the improved wheat, as bred and distributed by the college, it is very important to keep the wheat pure. When the wheat is grown for seed it should be clean land which is free from volunteer wheat and from other volunteer grain, rye being especially objectionable. Care must be taken in harvesting and threshing the seed wheat to keep it from becoming mixed with other varieties of wheat. Again, in order to maintain the quality and yield of wheat it is necessary to main-

tain the fertility of the soil and to give the land good culture. It was found that the three important factors which had to do with the production of large crops of wheat were the good seed, the fertile soil and the well prepared seed bed. This season the wheat that was planted late on early plowed ground in a well prepared seed bed has given the best results.

#### HOW TO DETECT SWEET CLOVER IN ALFALFA SEED.

The detection of sweet clover in alfalfa seed is very important to the man buying seed, says Philo K. Blinn, of the Colorado Agricultural College; doubtless many are not aware that it is comparatively easy to detect it, if one is familiar with a few very characteristic points.

To examine seed successfully one needs a small lens, magnifying five to ten times, to determine the form of the seeds.

Alfalfa seeds are produced in spiral pods. Normally the seeds are "bean" or "kidney" shaped, and the scar of attachment is usually near the center of the seed. The over-crowding in the alfalfa pods causes irregularly shaped seeds, so little dependence can be placed on the shape of the seeds of alfalfa; but the seeds of sweet clover are very regular in form as the seeds are produced singly in little pods. The scar of attachment on the sweet clover seed is near one end and the seed is nearly oval in form, and quite regular, never in shape like alfalfa seed.

By spreading a sample of seed thinly on a sheet of paper, any seeds suspected of being sweet clover can be separated with the aid of the lens; and then, by chewing them fine, their taste will determine their identity without a doubt. Alfalfa seed has a distinct beany flavor, while sweet clover will taste like the sweet clover plant smells, strongly vernal.

The form of the seed, and the taste, are the characteristic points to determine the identity of the seed; and with a little practice, especially if one can compare the two, there will be no mistake in determination.

#### CORN SHOW ITEMS.

The New York Agricultural College (Cornell) will exhibit at the National Corn Exposition at Omaha in December next.

Frank D. Fuller, of Hermitage, Tenn., has been appointed vice-president of the National Corn Exposition for Tennessee, and will undertake to prepare a state exhibit from Tennessee.

A cup trophy will be given by the Kellogg Toasted Corn Flake Co., of Battle Creek, Mich., to the exhibitor at the National Corn Exposition of the best single car of corn. The trophy will have an intrinsic value of \$1,000.

The Iowa Corn Growers' Association's annual show, hitherto held at the Ames College, will be held this year at Des Moines on November 29 to December 11. The premium list includes prizes valued at a total of \$20,000. The exhibits will be of grains, grasses and the products of the horticulturists.

The corn show committee of the Illinois Corn Growers' Association, immediately before the oats harvest, appealed by circular to the farmer to save samples of oats in their natural state—the oats on their stalk—and also pick samples of the threshed grain. From these samples the committee will make the selections of grain to be shown at Omaha.

Jas. J. Hill, of the G. N., offers special prizes worth \$2,500 for small grains and grasses from the country through which the Great Northern road runs in Minnesota, the Dakotas, Montana, Idaho and Washington. The company will also assist the farmers in every way in taking exhibits to the National Corn Exposition at Omaha. Baggage cars are to be routed along the lines and pick up exhibits which will be carried to Omaha without expense to the exhibitors.

Zahm & Co., Toledo, July 31, say: "Alsike is beginning to move. The quality is poor. Samples to date show great deal of brown and shrunken seed. Some show more or less timothy. Trade here looking for a short crop. Price of n. e. g. depends upon the quality and how badly it is mixed with other

seed. Don't pay too much for this poor stuff. It won't sell close to prime, nor advance much with it. The safest way if you can is to send in your samples and get grade and value before buying, and then buy it at liberal discount."

#### FIELD SEED NOTES.

Ohio reports a light crop of clover seed.

The first car of new crop flaxseed arrived in Chicago on August 4 from the Southwest. It graded No. 1.

The Gurney Seed Co. has let the contract for its new seed house at Yankton, S. D. It will cost about \$9,000.

C. S. Sheffield, grain and seed merchant, La-grange, Ky., has applied for membership in the Minneapolis Chamber of Commerce.

Dr. Nye, of Hubbard, shipped out of Menahga, Minn., on July 1, a car of clover and tame grass seed to Northrup, King & Co., Minneapolis.

The South is rapidly increasing its corn area, which planters and bankers alike are coming to consider a safer crop than cotton in the boll weevil districts.

Samples of this year's alsike seed as received at Toledo, O., in July from Ohio and Indiana were not very promising, says the Market Report, being mixed with brown seed as well as being dirty and shrunken.

Mr. Edw. H. Young, of Evansville, Ind., in Toledo the other day said that clover seed crop in southern half of his state will be practically nothing, while the northern half will be less than average. Dealers from Indiana, Michigan, Ohio and Illinois at Cedar Point hay meeting said 20 to 25 per cent of crop is all that is expected.

Illinois seed dealers write King & Co. that their last crop was underestimated. He says: "I notice by your report that Illinois, last crop of clover seed was only 30,000 bushels. This is certainly an error, as I know half a dozen dealers in this vicinity who bought half that much themselves. Prospect for next crop not very good, as most old clover was winter-killed."

Crumbaugh & Kuehn, grain and seed merchants, Toledo, have incorporated their business as the Crumbaugh-Kuehn Company and admitted to membership W. R. Hadnett, a local seed inspector, and F. R. Moorman, formerly of the McCabe Grain Company. The officers are as follows: President, E. W. V. Kuehn; vice-president, W. R. Hadnett; secretary, E. N. Crumbaugh; treasurer, F. R. Moorman.

Shippers, be careful in taking samples. A little off the top, is like taking cream off of milk. Take a trier, probe the center and both ends of the bag, then you will get nearer an average sample. This will help to prevent disappointments in the grade. If you sell by sample the buyer dictates the difference he will apply should it misgrade, but not so with consignments, as you get the benefit of competition.—C. A. King & Co., Toledo.

Kansas man who had a big crop of alfalfa hay said: "Yes, there are a few keeping the second crop for seed, but I do not think they will get much seed. The crop is too heavy and you never see a big crop of seed when the plant grows fast and tall. The best seed is produced when the stalk grows slower and is not rank. I am not going to cut for seed until the next crop. The ground this season is in excellent condition for the third crop."

Tennessee has a law, effective June 1, 1909, regulating the sale of agricultural seeds offered or exposed for sale in that state, and red rust proof oats are termed "agricultural seeds." The law provides for the standard of purity of agricultural seeds, and prescribes penalties for the violation of same. Under this law seed oats must be 98 per cent pure and 90 per cent germinable. Should you contemplate selling seed oats to Tennessee concerns, it will be well to remember the requirements of this law, as the inspectors advise us that there is quite a lot of trouble with inspections of seed oats in that state.—G. J. Gibbs, Fort Worth, Texas.



## COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

### NEW GRAIN ELEVATOR IN MASSACHUSETTS.

*Editor American Elevator and Grain Trade:* Elmer E. Cole, of Billerica, Mass., has just completed one of the most up-to-date elevators in the N. E. States. It has a capacity of 70,000 bus. of grain and about 30 cars of sack stuff.

The elevators in the main part of the mill are driven by individual motors,—an 11-h.p. on the main elevator and receiving separator, and a 5-h.p. for driving the conveyors, etc. The power is derived from an 80-h.p. Advance Producer Gas Engine belted direct onto the main line for driving the grinding machinery and elevators for same. There is also a 20-h.p. gasoline engine for pumping air, unloading coal and elevating grain when the large engine is not in operation, and making electric lights.

The machinery for grinding consists of: One 3-pair-high 9x24 roller mill, one 24-in. Excel Attrition Grinder, one No. 6 Style "A" Excel Corn and Cob Crusher with four stands of elevators for operating same, one 11x36 reel for corn meal, one Invincible Cracked Corn Scourer.

The machinery is so arranged that by the use of clutches and cut-off couplings each machine can be operated separately.

The machinery was laid out and installed by L. B. Dow, of 176 Federal street, Boston, Mass., as engineer, and is considered a very efficient and complete plant for handling grain here in the East.

Billerica, Mass.

XIX.

### THE NEW TURKEY HARD WHEAT GRADE.

In answer to an inquiry as to the probable effect on the market of the new Kansas Turkey Hard wheat grade we have the following from Kansas City:

*Editor American Elevator and Grain Trade:*—In our opinion the establishment by the Kansas State Grain Grading Commission of grades of Turkey Hard wheat will have no effect on the general movement or prices. This Turkey wheat is sold by sample on its merits.

Yours very truly,

GEO. A. ADAMS.

President Geo. A. Adams Grain Co.

*Editor American Elevator and Grain Trade:*—It is our opinion that there will be no change in the movement of wheat due to the establishing of a grade of Turkey Hard wheat by the Kansas Grain Grading Commission, as it has been customary, on wheat purchased from the country, for the seller to ship the poorest quality, or yellow variety, and to either consign or sell by sample the dark or Turkey variety.

Yours truly,

HALL-BAKER GRAIN CO.,

Per H. F. Hall.

*Editor American Elevator and Grain Trade:*—We are in receipt of your favor of the 6th, asking what effect the establishment of a "Turkey Hard Wheat Grade" in Kansas will have on the general movement of wheat and prices. It will have no effect whatever.

Yours truly,

THE MOFFATT COMMISSION CO.,

Per G. A. A.

### ST. LOUIS WEIGHING BUREAU.

*Editor American Elevator and Grain Trade:*—As the welfare of the St. Louis market is a matter in which I am at all times vitally concerned, I desire to correct an erroneous impression which it appears that some one connected with your valuable journal has obtained from the public prints or otherwise.

Some time ago there was a rumor prevalent that the Illinois Railroad and Warehouse Commission contemplated discontinuing supervising the weighing of grain in East St. Louis. My information at the present time is that they have decided to continue weighing as heretofore. It appears, however, that the impression is that it was the Merchants' Exchange Weighing Department that contemplated withdrawing from East St. Louis. I desire to say that this was never even remotely considered.

There is another matter on which I wish to set you right. This is relative to a petition being circulated among the members of the Merchants' Exchange to abolish the Department of Weights. I understand from some of the local trade that you have made inquiries of them concerning the matter.

Such signers as the sponsors of this movement have been able to obtain are almost without exception parties who have no connection with the grain business and have no immediate interest in encouraging the consignment of grain to St. Louis; in fact, the movement is backed by an element whose interests are hampered by the stringent regulations that the Department of Weights has enforced and who by this means seek to retaliate in the hope that the Exchange will call off its fight on them. No doubt a number of members have signed the petition through lack of information as to the source from which it emanates and they will, as soon as they are informed on the subject, repudiate the whole proceedings.

Yours truly,

ST. LOUIS,

St. Louis, Aug. 9.

### BAD-ORDER CARS AT GALVESTON.

*Editor American Elevator and Grain Trade:* Enclosed you will find statement of the total number of cars of grain unloaded at our Elevators "A" and "B" during the season of 1908-09; also statement showing the total number of cars that arrived in a leaking condition, and statement showing where the leaks occurred.

Being interested in the grain business, you no doubt will be interested in this matter, and we feel that the enclosed information will be of value to you.

This statement has been compiled in the hope that it will bring about better coöpering of the cars, and therefore, result in a decreased number of cars arriving at this port out of condition.

J. J. DAVIS,

General Manager Galveston Wharf Co.

Galveston, Texas.

Statement of cars of grain unloaded at Galveston Wharf Company's Elevators "A" and "B," season of 1908-1909, together with the number of cars leaking:

|                                |       |
|--------------------------------|-------|
| Cars unloaded .....            | 7,429 |
| Number of cars leaking .....   | 4,076 |
| Percentage of leakage .....    | 54.9% |
| Total number of leakages ..... | 4,859 |

Leakage divided as follows:

|                            |       |
|----------------------------|-------|
| Bottom of grain door ..... | 650   |
| End of grain door .....    | 369   |
| Through grain door .....   | 27    |
| Bulged grain door .....    | 1,264 |
| Side of grain door .....   | 59    |
| Over grain door .....      | 12    |

|                                           |       |
|-------------------------------------------|-------|
| Total account grain doors .....           | 2,381 |
| End window .....                          | 288   |
| Lumber door .....                         | 22    |
| Side of car .....                         | 392   |
| End of car .....                          | 834   |
| Bottom of car .....                       | 114   |
| Corner of car .....                       | 3     |
| Both ends of car .....                    | 2     |
| Door post .....                           | 221   |
| End post .....                            | 239   |
| Draw bar .....                            | 311   |
| King bolt .....                           | 132   |
| Broken corner .....                       | 5     |
| Draw bar pulled out .....                 | 4     |
| Ice box .....                             | 1     |
| Total account physical condition of car.. | 2,478 |

|                      |       |
|----------------------|-------|
| Total leakages ..... | 4,859 |
|----------------------|-------|

Divided as follows:

|                                  |       |
|----------------------------------|-------|
| 3,393 cars leaking 1 place ..... | 3,393 |
| 600 cars leaking 2 places .....  | 1,200 |
| 67 cars leaking 3 places .....   | 201   |
| 15 cars leaking 4 places .....   | 60    |
| 1 car leaking 5 places .....     | 5     |

|                                                                |       |
|----------------------------------------------------------------|-------|
| 4,076 .....                                                    | 4,859 |
| Percentage of leakage account grain doors .....                | 49%   |
| Percentage of leakage account physical condition of cars ..... | 51%   |

### THE ARGENTINE IN 1908.

The Argentine Republic was one of the few countries reporting increased trade values in 1908, says the "Annual Review Number" of the *Bulletin* of the International Union of the American Republics. The increase of \$56,000,000 for the year was largely due to the immense grain exports of the year. Of these wheat took the lead with 3,636,294 tons, an increase of 955,422 tons over 1907; corn, 1,711,804 tons, an increase of 455,492 tons; oats, 440,041 tons,

a gain of 295,475 tons; flaxseed, 1,055,650 tons, a gain of 291,914 tons over 1907. The American imports of cereals from the Argentine were 4,000,000 bushels of oats and 200,000 bushels of corn. Great Britain, Germany, Belgium, The Netherlands and Brazil took over 90 per cent of the Argentine shipments of wheat, corn and flax.

The acreage under cereals and flax in 1908 was 39,500,000, divided as follows: Wheat, 15,000,000; flax, 3,835,000; corn, 7,434,000; oats, 1,393,000. This is an increase in the number of acres under cultivation, compared with 1895, of 216 per cent, of which a large part is due to the enlarged wheat acreage, which increased 195 per cent. In the same period the corn acreage increased 138 per cent. That under oats also increased largely, but the percentage is not given. Alfalfa is also a great crop, the acreage in 1908 reaching 10,000,000, it is estimated, against 1,782,000 in 1895.

### MAURICE NIEZER.

Business in this Western country of ours has so far passed the tentative era that many business houses are repeating, or, rather, perpetuating, the old signs and firm names with "and Son" appended, always a evidence of commercial stability founded on integrity and personal popularity, and a guaranty of further usefulness to the trade and commerce of



MAURICE NIEZER.

the environment. We see so often in this country the legend, "This place has changed hands," that we don't always appreciate what it means to see an old business name standing unchanged as one generation after another moves on from alpha to omega.

The name of "Niezer" in the grain and hay business is an old one in the state of Indiana, and an honorable one; and although the firm name today at Fort Wayne (and branch stations) is Niezer & Co. instead of "Niezer & Son," the son is there, following in the ways of a father who founded a popular business. Maurice Niezer, the son, was born at Monroeville in August, 1875; and after getting his education in the common schools and the Business College at Fort Wayne, he went to work in his father's grain elevator, where he learned the business in the elevator and in the office. This was sixteen years or more ago, and during that period he has become one of the leading men in his line of business in Indiana—one of those dependable men whom the National Hay Association turned to a year ago and made president of that great association and who has just surrendered office to Mr. H. W. Robinson of Ohio after a very successful administration.

When the hay and grain business which had been controlled and operated by Mr. Niezer's father was incorporated on April last as Niezer & Co. (Inc.), the main office was removed to Fort Wayne, from which city its operations at several stations are now directed, Maurice Niezer being secretary-treasurer of the corporation.



## ASSOCIATIONS

The Miami Valley Grain Dealers' association, at a recent meeting, elected the following officers: President, L. J. Custenborder, Sidney, O.; vice-president, L. G. Shanely, Pemberville, O.; secretary, M. W. Miller, Piqua, O.; treasurer, C. N. Adlard, Piqua, O.

Sec'y G. J. Gibbs of the Texas Association reports having had replies to 75 per cent of his circulars of enquiry as relative to corn crop conditions in that state. This is a good average; but it is a fair query, why should he not have had 100 per cent?

Secretary G. J. Gibbs reports the following changes in membership of the Texas Grain Dealers' Association: The Plains Lumber & Grain Co., at Happy, Texas, has resigned from the Association; The Blackburn-Hollingsworth Grain Co., at White-wright, Texas, has been elected to membership; the membership of Smith, Wiley & Co., at Sanger, Texas, has been changed to Wiley Grain Co., at same place, Mr. W. M. Smith having retired from the firm.

Representatives of thirty firms and corporations which ship grain from Chicago have organized the Grain Shippers' Club of Chicago. The purpose is to bring the grain shippers of the city into closer contact, and to have them act as a unit when it is desired to institute a movement for amelioration of any troubles that may arise. Officers were elected as follows: President, A. O. Mason; secretary and treasurer, W. G. Husband. Dinners will be held once a month.

### NATIONAL ASSOCIATION.

Secretary Courcier announces the following additions to the list of those who have adopted the grades of grain promulgated by the National Association at its St. Louis Convention:

Cleveland Chamber of Commerce, Cleveland, Ohio. Mansfield Chamber of Commerce, Mansfield, Ohio, with the following additions to take care of conditions peculiar to the Mansfield market:

"Michigan No. 2 Rye, shall be Michigan-grown grain, dry, sound, sweet, and contain not more than one per cent of other grain or foreign matter, and weigh not less than 56 lbs. to the measured bushel."

"Wisconsin No. 1 Rye, shall be Wisconsin-grown grain, dry, sound, and contain not more than one per cent of other grain or foreign matter, and weigh not less than 56 lbs. to the measured bushel."

The United States Department of Agriculture has supplied the Secretary with 100 copies of Circular No. 32 of the Bureau of Plant Industry relative to "Moisture Content and Shrinkage in Grain." Requisitions from members for this circular will be filled until our supply has been exhausted.

### TRI-STATE GRAIN DEALERS' ASSOCIATION.

Under date July 12 J. J. Quinn issued a circular letter to the Tri-State Grain Dealers' Association of the Northwest, substantially as follows:

"At a meeting of the governing board, held in Minneapolis, on Thursday, July 8, it was decided that the time was opportune for the Association to again take up, in an active and vigorous manner, the many questions that vitally interest every shipper of grain, and to endeavor, through the active co-operation of all dealers with the secretary of the Association, to place the grain business upon a satisfactory basis.

"Mr. W. L. Beaton of Minneapolis will succeed the writer as secretary. Mr. Beaton has had a very wide range of experience in the grain business and is thoroughly familiar with all its phases. He will give his most earnest efforts to bring about conditions and reforms that will prove of very great benefit to the entire membership.

"In order to assist him in giving you a successful administration of the Association's affairs each member must feel it incumbent upon himself to render him every assistance by keeping him in close touch with actual conditions throughout the territory.

"While the writer, who has served in the capacity of your secretary for several years, is severing his connection with the Association, I do so with the kindest feelings towards its officers and members, and believe that through the efforts of my successor, Mr. Beaton, the Association will be placed upon a sound basis and that very satisfactory results will be given to all the membership."

Mr. Beaton, on accepting office, in a circular dated July 13, said, in part:

"I realize that in order to bring about the desired results, I must receive the hearty co-operation of every member of the Association. I will, therefore, kindly ask you to put your shoulder to the wheel and assist me in trying to revive interest in the organization by increasing its membership; by trying to interest the members who have become somewhat indifferent to join us in making a grand success of the work; and by reporting everything to me that would be of interest to the grain trade. In union there is strength, and if we can only work together with one object in view, we are bound to accomplish much. The work that can

be done by this Association in the interest of the grain trade is almost beyond comprehension.

"Harmony may be touched upon at some length, also the method in which grain is handled at the terminal and while in transit, as well as the manner in which it is handled at local points. We expect to establish what is known as a "Claim Bureau," whereby members who so desire may turn their claims for loss of grain in transit or overcharge in freight, or claims of any nature, over to us, and by so doing, we hope to systematize the work in such a manner that all legitimate claims will be collected.

"I will make it a point to call on as many of you as it is possible for me to do. However, I do not want you to wait for a personal call from me, and want you to call on me whenever you can make it convenient to do so. Come to me with your troubles. If you are not able to call on me personally, please do not hesitate to write and I will be only too glad to give you any assistance that I can."

Mr. Beaton's office will be at 324 Chamber of Commerce Building, Minneapolis.

### ILLINOIS ASSOCIATION DIRECTORS' MEETING.

The board of directors of the Illinois Grain Dealers' Association held a meeting in the Great Northern Hotel, Chicago, on July 29, to take up matters pertaining to the general policy of the Association.

The resolutions passed by the sixteenth annual convention of the Association, held at Peoria last June, were taken up and committees appointed to carry them out.

In response to the resolution in relation to steel cars for grain, a number of letters were read from different railroads acknowledging receipt of the resolution, and several of them stated that steel cars for handling grain would be the ultimate result. Several railroads reported that the matter of steel cars for handling grain was under consideration by their officers controlling the equipment department.

By a unanimous action, the board of directors directed the Secretary to make an application for membership for the Illinois Grain Dealers' Association in the National Council of Commerce whose headquarters is at Washington, D. C., believing that it would be to the interest of the grain trade to be in touch with the Department of Labor and Commerce of the general Government; and President Montelius stated that if a membership was granted on the application he would appoint Mr. E. M. Wayne, Delavan, ex-president of this Association, to be the delegate.

A communication was received from R. Kirkland, freight claim agent of the Illinois Central R. R., advising that at a meeting of the National Association of Freight Claim Agents, held at Old Point Comfort, Virginia, last June, a resolution was passed, authorizing the president of the Freight Claim Agents' Association to appoint a committee of five to meet a like committee from the Illinois Grain Dealers' Association, to take up the matter of claims and discuss them, with a view of arriving at the best practical method for their adjustment.

The committee appointed by the Freight Claims Agents' Ass'n is composed of: R. Kirkland, chairman, Freight Claim Agent, Illinois Central R. R., Chicago; Mr. G. W. Davis, General Freight Agent, Vandalia Line, St. Louis; Mr. A. A. Hayes, Freight dalia Line, St. Louis; Mr. A. A. Hayes, Freight Auditor, A. T. & S. F. Ry., Topeka, Kan.; Mr. W. O. Bunker, Freight Claim Agent, C. R. I. & P. Ry., Chicago, and Mr. J. D. Shields, Auditor of Freight Accounts, C. B. & Q. Ry., Chicago.

By action of the board of directors President Montelius was empowered to appoint a committee of five of the Illinois Grain Dealers' Association, to meet the committee of the Freight Claim Agents' Association, which he did, as follows: Mr. Wm. R. Bach, attorney, Bloomington, chairman, manager of the Claims Department of Illinois Grain Dealers' Association; Mr. R. C. Baldwin, Bloomington, member of Baldwin-Walker-Tankersley Co.; Mr. E. M. Wayne, Delavan, Ill., member of Wayne Bros. Grain Co., ex-President of Illinois Grain Dealers' Association; Mr. Geo. D. Montelius, Piper City, Ill., member of G. D. Montelius & Co., and President Illinois Grain Dealers' Assn., and Mr. S. W. Strong, Pontiac, Ill., Secretary of Illinois Grain Dealers' Association.

The time and place of the meeting of these committees will be determined by correspondence.

The following dealers having made application for membership to the board of directors, and their applications being duly approved by two members in contiguous territory, by an unanimous vote they were received as members of the Illinois Grain Dealers' Association: Coulson & Adams, LaHarpe; C. L. Grimsley, Swan Creek; Risser-Rollins Co., Kankakee; Freburg & Tucker, Walnut Grove; Hunter Grain Co., Macomb; H. Van Beuning & Co., Emden; T. F. Young & Son, Abingdon.

President Montelius appointed the various committees as required by the constitution and by-laws of the Association, and directed the Secretary to advise them of their appointment.

After a very general discussion of matters relating to the Association the board adjourned.

## FACTS AND FIGURES

The rice weevil is said to have reached America in Chinese rice unloaded from the British S. S. Tactician at New Orleans.

Shipments from Montreal of Western wheat crop of 1908 were a little under 1,000,000 bus. less than for the crop of 1907 to July 1.

The first car of spring wheat of this year's crop was received at Chicago August 9. It came from Illinois, graded No. 3 and sold at \$1.05. Last year the first car was received August 6.

Seattle received the first cars of new crop wheat on July 27 from the Big Bend country consigned to MacDonald & McBean, dealers. It was Turkey Red and Fife varieties and tested better than 60 lbs.

Free use of an elevator has been offered the Farmers' Union of Washington, Oregon and Idaho by the Chamber of Commerce of Astoria. This offer is made as an inducement to make Astoria the export station of the Farmers' Union for the three states named.

Branch inspection offices have been established by the Kansas department at Leavenworth, J. B. Edwards of Abilene in charge, and Hutchinson, with Charles G. Smith of Pratt in charge. At Wichita Harry W. Hill has been appointed an addition to the inspection force.

The Idaho State Grain Commission has organized, the members of the commission being J. L. Woody, Kendrick; George Cowgill, Grangeville; Eli T. Simmons, Idaho Falls. A. W. Lee of Juliaetta has been appointed State Grain Inspector.

The rice area of the U. S. is estimated at 630,352 acres, of which 283,282 are in Texas, 392,000 in Louisiana, 27,930 in Arkansas, 18,400 in South Carolina, and the remainder in Georgia, Florida, Alabama, Mississippi and North Carolina, ranking in the order named.

The Minnesota Railroad and Warehouse Commission gives notice that commission merchants of the second and third classes who receive grain on consignment to be sold on commission must take out licenses and file bond as required of commission merchants of the first class who deal in grain only.

The Dominion Railway Commission, after taking testimony as to the rates and other remunerative details, has ruled that the elevator charges at Fort William and Port Arthur are not excessive or burdensome; and has refused to order a reduction, as asked for by the Dominion Millers' and the Manitoba Grain Growers' Association.

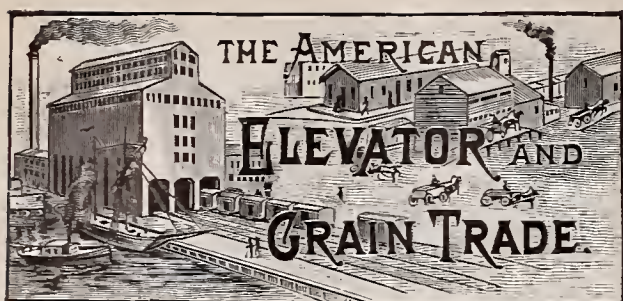
With the beginning of the present fiscal year the Republic of Cuba established a Bureau of Information, President Gomez appointing Leon J. Canova, an American newspaper man, who has resided in Cuba eleven years and has a wide acquaintance with the Island, as its director. Parties wishing information of any nature concerning Cuba can obtain same, free of charge, by writing to Leon J. Canova, U. and I. Bureau, (Utility and Information Bureau), Department of Agriculture, Commerce and Labor, Havana, Cuba.

Combination rates for carrying grain from North Pacific ports to the United Kingdom will continue to be demanded by the members of the Sailing-ship Owners' International Union. The International Union was formed several years ago, following disastrous competition for business among owners of sailing ships. The members of this organization are largely British, but a few German and French ships are included. Under penalty of a heavy fine, the owners are not allowed to charter their ships for less than the minimum rate, which from Puget Sound and Portland is 27s. 6d. (\$7 per ton) for grain.

We fear many shippers pay too much attention to the test weight of wheat and not enough to its general character. Remember that the test weight does not make the grade. Some 58 pound wheat is so badly shrunken, grown or sprouted that it will not grade better than No. 3 Red. We have seen some samples full of what are called "tombstones" that would test heavy but would not grade No. 2. Such wheat is not sound, and therefore the test weight of itself does not make it grade No. 2 Red. Look out for the "tombstones." If you don't and buy it as No. 2 Red, you may feel like having a "stone" placed over you at the end of the season.—J. F. Zahm & Co., Toledo.

Owing to the wet lands, farmers in the winter wheat country were put to much discomfort to cut small grain, and frequently were at their wits' end to devise ways and means to cut it at all. Cradles were common, where they could be obtained, while in one instance, reported from Modale, Ia., in the Missouri Valley, "a gasoline engine was put on a truck attached to the rear of the binder, using beer kegs for wheels for the truck, as any ordinary wheel would sink too deep to be of any utility. It was also found necessary to board up the binder's master wheels to prevent them from clogging. Others are trying to drag the machines on mud boats."





PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

**MITCHELL BROS. COMPANY**

(INCORPORATED)

**OFFICE:****Manhattan Building, 315 Dearborn Street,  
CHICAGO, ILL.**HARLEY B. MITCHELL.....Editor  
A. J. MITCHELL.....Business ManagerSubscription Price, - - - \$1.00 per Year  
English and Foreign Subscription, - 1.75 " "**ADVERTISING.**

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

**CORRESPONDENCE.**

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

**CHICAGO, AUGUST 15, 1909.**

Official Paper of the Illinois Grain Dealers' Association.

**ST. LOUIS DEPARTMENT OF WEIGHTS.**

Suspicious of the accuracy of a St. Louis newspaper item which conveyed the impression that the Illinois Railroad and Warehouse Commission would eject from East St. Louis elevators, etc., the supervisors of weights placed therein by the St. Louis Merchants' Exchange Department of Weights; and interested also in the statement similarly made that a movement was on foot within the Exchange itself to abolish that Department, the AMERICAN ELEVATOR AND GRAIN TRADE made some enquiries in St. Louis as to the accuracy of both reports, queries which were sufficiently definite as to have interested that market. The facts are given in the letter signed "St. Louis," which we can assure the reader has the sanction of the best authority in the market on this subject.

The meaning of it all is that the weighing on both sides of the Mississippi at St. Louis will continue as in the recent past, and will be supervised by the Exchange's Department of Weights which within a few years has lifted the weighing of that great market out of the mire of incompetency and dishonesty to the high level of efficiency and honesty that has made St. Louis as safe a market to ship to as any in the world.

The participation of the State authorities of Illinois in the Weighing at East St. Louis entails a double charge at that point, that shippers justly complain of; but the Illinois Association in its resolution adopted at the Peoria convention in June, asking the Merchants' Exchange to "take action toward eliminating the useless burden of double weighing charges," contemplated some expedient for ousting the state weighers, who, without the supervision of the Exchange, have always been unsatisfactory and unreliable, rather than the Exchange's employes who brought order out of the prior

chaos; and rather than not enjoy the service of the latter, shippers are content to pay the double charge needlessly forced on them by the state.

**SHIPPERS MAY ROUTE GRAIN.**

Some shippers have the idea that they cannot dictate the routing of their grain, but that the carrier has exclusive control over that matter. This is a mistake. The Commerce Commission in *Albert Preston vs. C. & O. Ry. Co.* (Op. 1019) and in *Hill & Webb vs. M., K. & T. Ry. Co. et al.* (Op. 1021) and other cases, has awarded reparation on account of misrouted shipments.

In the *Preston* case the decision (Clements, C.) says: "Where a shipper directs the routing, it is the duty of the carrier to follow his instructions."

The Commission said also in this case: "It is well settled that in the absence of specific routing instructions a carrier is obliged ordinarily to carry a given shipment tendered *via* the route taking the lowest rate." But in the *Hill-Webb* case, while reparation was ordered, the amount was less than asked for, because, it was said, "It is an entirely erroneous assumption that where there are two or more lines with different rates between two points a shipper may secure the application of the lowest rate by either of such lines regardless of the one which he uses. The law requires each carrier to adhere to its own established rate."

In this case a lower rate might have been secured by choosing a different initial carrier, which would have enabled the shippers to make a different connection which would have saved them five cents per 100 lbs., a fact the shippers overlooked in their reliance perhaps on their belief that when there are two different routes between two points the rate is necessarily the same by both.

**THE NEW TARIFF.**

The new tariff act taxes imported barley 30c. per bushel; barley malt, 45c.; buckwheat, 15c.; corn, 15c.; oats, 15c.; rice, 1 1/4c. per lb. not cleaned and 2c. cleaned; rye, 10c. per bushel; wheat, 25c.; beans, 45c.; hay, \$4 per ton; straw, \$1.50 per ton; flaxseed, 25c. per bushel,—rates that are taken without change from the Dingley law.

It may be that the farmers will receive some benefit from these rates; but there is a grave suspicion that the rates are largely *pro forma*, as they always have been, in the interest of consistency; and they certainly must be so, so long as the U. S. continues to be an exporter of grain, or a surplus nation; because in such case, as the *Market Record* has said:

Home values are ordinarily based upon the average values paid by importing countries, less the intermediate cost of transportation and incidental charges. Therefore the lowest prices of grain are as a rule found to be at points most remote from importing centers.

The countries of eastern Europe being the great grain importing section of the world, they most scientifically play one exporting country against another to secure the lowest possible cost. While it is true that systems of speculation may maintain domestic values above the export basis and so, by stopping exports, influence the world's markets and secure a rise in world's prices, to the advantage of our own country, it is a hazardous undertaking which often ends in disaster. At least it is not a method to recommend.

Germany alone has been able by a tariff to

apparently avoid this dilemma, but she does it by a resort to sophism that is exceedingly costly to her own people. By her regulations of import duties her prices of domestic grain are maintained by Germany on the average above a parity with prices in any other country. German prices of home grown wheat ranging some 20c. a bushel above Liverpool and London prices; and yet by an ingenious system of drawbacks which constitute a considerable bounty on each, Germany is a successful exporter of both wheat and wheat flour in competition with all other countries, largely supplying several of the smaller countries of Europe with both at prices lower than America can meet, the common people in the meantime paying the maximum prices for wheat flour or eating, as the large majority of them do, "black" bread (rye) and also contributing to the bounty paid directly from the national treasury.

**NON-COMPETITIVE POINT.**

The recent decision of the Commerce Commission that Philadelphia is a non-competitive point, speaking after the manner of railroad men, and therefore not entitled, at the hands of the railways or the Commission, to the same kind of treatment that is accorded shippers at a "competitive point," like New York, say, has awakened at the Quaker City an unwonted interest in local traffic conditions. The city has been "taking what's left" for a long time; but not until the Commerce Commission declared that it was entirely proper for the Philadelphia roads to allow flour ten days' free storage time at the New York terminal and only four at Philadelphia, because competition and its natural disadvantage of location made ten days necessary at New York, did her people awaken to the fact that Philadelphia is on the railway map only to be used as a lever by her own roads to procure and hold a position in New York in the fierce competition there they could hold by no other means, perhaps.

To the lay mind these "intricacies" of the transportation problem are a great puzzle. If a city by its favorable location has natural advantages for becoming a great commercial emporium, the layman can hardly understand the justice of any procedure that legally sustains the whim of carriers that for their own purposes would destroy or nullify those advantages and reverse the evident intent of Nature to build great cities at certain points rather than at others.

**THE CORPORATION TAX.**

The injection of the corporation tax into the new tariff act is justified on two grounds, to wit, (1) the Government "needs the money"; and (2) the Government thinks it would enable the administration to "keep tab" on the performances of those corporations commonly denominated by the public as "trusts."

As to the first point, it need hardly be said that the administration is not wise in thus assuming the right to spy into the business affairs of thousands of joint stock companies when a larger amount of revenue (50 or more millions annually) could have been obtained without the employment of one additional clerk and without the cost of one single penny for collec-



tion by doubling the tax on malt liquors, as was done during the Spanish-American War without the slightest disturbance or injury to the brewing business.

As to the second point, the big corporations may or may not be well enough supervised now, but at any rate, it seems a pretty cumbersome expedient to reach the "trusts" over the shoulders of thousands of lesser corporations that need no special control or regulation over and above that exercised by the states under whose charters they operate.

Will the returns from this tax warrant its cost in money and public vexation? One may well doubt it.

#### COST OF CARELESSNESS.

The art of collecting claims is the art of taking pains. This cannot be too much dwelt upon. Mere "say so" doesn't go very far; but documents duly authenticated and supported by witnesses rarely fail to reach the desired object.

The records of the Commerce Commission illustrate the truth of the remark. The Commission has decided that carriers are bound to furnish the size of car ordered by the shipper; but the Commission, in the case of the Wheeler Lumber, Bridge and Supply Co. vs. The S. P. Co. et al., insists also that the evidence shall sustain the allegation that a car of certain size was ordered, before it will order redress by the carrier for not furnishing such car.

The Wheeler Company, for example, had an order for lumber, weighing 32,200 lbs., to go from Oregon to Iowa; but it was shipped in a car marked 60,000 lbs.' capacity; and the Wheeler Company asked in behalf of its consignee a refund of \$92 of the freight paid, alleging that if a small car had been furnished the freight would have been assessed on the actual weight of the shipment.

But the railway claim bureau rejected the claim for want of evidence to support it, and on carrying it to the Commerce Commission, neither the shipper nor the consignee were able to show that a small car had in fact been ordered by either party for this shipment. Indeed, the consignee was on record as saying that, "Size of car wanted was not specified, nor car of any particular capacity mentioned, except that 11,000 ft. of lumber was to be loaded. . . . Do not recollect size or capacity of car furnished but of opinion it was of small capacity and suitable for the lumber to be loaded." The effect on the Commission of this way of doing business can best be expressed in the words of the opinion itself, by Commissioner Harlan:

Where there is a conflict in the testimony as to the date of a movement, the rate that was lawfully in effect, the route taken, the size of the car actually used, or the weight of the shipment, the official records of the carrier may be resorted to in arriving at a correct conclusion; but where a shipper claims that he ordered a car of a certain size for a particular shipment and this is denied by the carrier, and it is not pretended that the order was in writing, the conflict can be resolved only by considering all the evidence and ascertaining on which side the preponderance or weight of the testimony may lie. There are no records to aid us on this point of doubt except the record which the complainant has made against itself in the letter from which we have quoted. We are not to be understood as expressing a definite and final conviction that this letter indicates a fraudulent purpose on the part of the complainant to manufacture testimony in aid of a complaint which it was about to file before us; but the least that can

be said of it is that it has not made an agreeable impression upon us. Aside from the letter there is nothing in support of the petitioner's intention. The complaint must therefore be dismissed for want of proof to sustain its allegations.

A little more care to order the car in writing, in this case, would have brought either the proper car, in the first place, or redress because such a car was not furnished.

#### INFLUENCE OF INSPECTION.

It is a matter of regret that the pressure on the space of the AMERICAN ELEVATOR AND GRAIN TRADE has compelled the publication by piecemeal of Mr. Shanahan's paper read in May at Oklahoma City, on "Grain Inspection and its Influence on Trade"; for in several ways the paper is the ablest of the many valuable addresses to the trade he has made since entering the Government employ.

Not unmindful that there are those who consider the "grain standardization" work on which Mr. S. is engaged as somewhat supererogative, in spite of the many valuable things already accomplished for the trade, one can nevertheless venture to say the present section of the paper clearly demonstrates that so long as this country continues to be an exporter of grain any effort along the line of improvement of the inspection itself and of elevation of the moral standards dominating the export trade cannot fail to react not only on the volume of that trade (within possible limits of our surplus production of grain) and on its money returns to producers and handlers.

It is not too much to say that Mr. Shanahan's work at Washington has had its weight in bringing about what has already become a positive movement toward a more uniform and more reliable, as well as satisfactory, inspection of grain in both the export and domestic trade; and this sentiment in the trade is due wholly to a realization, demonstrable in the export trade, if nowhere else, that the inspection of grain has not in the past and is not now in all places and respects what it should be to uphold the higher standards of American commercial honor.

#### THE INTERNATIONAL INSTITUTE.

Whether the International Institute of Agriculture at Rome at this moment justifies its existence by practical work is beside the question, seeing that it is still in the tentative stage and hardly in a position to demonstrate that it is doing any "good" to the people of the United States, to the satisfaction of such exacting statesmen as Gaines of Tennessee and Rucker of Missouri. But at least the proposed work of the Institute (the collection of crop statistics and the dissemination in a synonymous manner of reports on growing crop conditions) has the approval of 48 nations, only a few of which now collect such statistics and publish them in an intelligent manner, but all of whom may be stimulated by the Institute to do so. Not only that, but it has the endorsement of such high authority as Secretary Geo. F. Stone of the Chicago Board of Trade, who some time ago said: "The purposes of the Institute forcibly appeal to all business interests, and especially so to those who are interested in the collection of reliable statistical information concerning the chief crops of the world;" and of

Secretary McGuirk of the Liverpool Corn Trade Association, who has said that, "The project is one of supreme importance to the commercial and industrial world;" and of Prof. D. C. Lee, formerly of Cornell University, who says that the former skepticism of Europe has changed, and that "the sentiment of the well-informed of Germany, France and England has crystallized into a strong support of the Institute," a change which can be "traced directly to the marvelous success that has followed the first efforts to bring the nations into homogeneous coöperation," etc.

The Institute may be a "pure fake" as Congressman Mann of Chicago has called it in the House; but as to that most open-minded men are as yet "from Missouri." At least they are willing to give it a trial and so grant for the time being the petty pittance asked as the American contribution to the expenses of the Institute, which has a considerable endowment of securities and has been magnificently housed out of the private purse of the King of Italy.

#### COMMISSION RATES.

There has been in a number of markets a slight increase in the commission rates for handling wheat and barley, which in a measure equalizes the commission receivers' compensation with the increased cost of doing business in nearly all terminal markets of the country. Every observant and open mind must be aware that for a number of years the cost of doing business and of living everywhere has advanced; particularly is this true of the great cities and distributing centers. The grain shipper must also have noted the fact that grain and hay receivers in these markets have been rendering shippers a more comprehensive and expensive service in many ways than hitherto, without any material advance in the cost of that service, for all of which they are entitled to proper remuneration.

These expenses are properly chargeable to the grain, and may with entire propriety be passed on to the producer who at the most pays little enough in all competitive country for the joint service rendered him in the disposal of his grain by the grain dealer and the commission merchant, who between them have reduced the cost of marketing grain to a lower figure than that of almost any other commodity in general consumption that may be named.

The grain man, then, who pays the commission charge directly, need but "pass it on"; and he may do so with a clear conscience, for in doing so he is doing no one an injustice and exacting of no one a cent that is not fairly earned by its recipient.

The Society of Equity is still talking of operating a terminal elevator at Duluth—of trying to bail Lake Superior with a tin dipper. The *sang-froid* with which these theorists would tackle the great problem of handling, carrying and marketing the millions of bushels of grain grown in the Northwest with the capital of a peanut stand would be amusing if it were not certain that not a few of their friends on the farm really think there is something practical about the Society's scheme.



## EDITORIAL MENTION

Cincinnati has fallen into line, and will supervise grain and hay weights under the direction of her Chamber of Commerce.

Foul hay would disappear from our markets more rapidly than it is going if more of it were turned under as fertilizer before the weeds go to seed.

The "crop killer" has had a most desperate time of it this season. Even Mr. Patten has taken off his horns and is as meek as any grizzly well can be.

Oats are grading high, just now; but just the same it is well enough to keep a close watch on them, as a good many are stained and will grade lower on that account.

The New York Millers' State Association has declared in favor of National inspection of grain. May one be wrong in suspecting that here is a case of a body of men who need a wise Mentor at their elbow?

Spontaneous combustion of damp or uncured hay in barns continues to destroy property in spite of the belief of many that "it's all stuff." Shippers of hay will also take the hint to bale new hay rather loosely for the present.

Don't forget that the "Order Uniform B/L" requires, in markets not having state grain inspection, that permission to open cars for inspection be endorsed on the bill. If the shipper will make such endorsement and also instruct the agent to put it on "way bill," no delays in handling shipments will follow in any market.

Sec'y G. J. Gibbs in presenting to his membership certain arbitration decisions by the Texas and Oklahoma Associations, makes this excellent suggestion which applies to all dealers: "If you will carefully study these decisions and preserve them for future reference, you will be benefited. You will observe that in all instances, the arbitration committee seeks to interpret the contract between the contestants, and the decisions are based on such interpretations; therefore, a study of the decisions will post you on the general rules followed by the grain dealers in Texas and Oklahoma."

The merits of the case against Inspector Nunn at Kansas City are not very clear at this distance; but evidently his office is not conducted with the best possible system. It does not appear that in the transaction that is laid to him as an official offense anyone suffered directly; but that method of correcting mistakes would hardly seem to be one meriting praise; for the air of mystery surrounding it is not encouraging to that ingenuousness which should obtain in a systematic and well ordered public office. However, just how much of "politics" and how much of real offending there is there, is not clear; and in that respect the affair borders on the scandalous and ought to uncover the fallacy that the political man-

agement of grain inspection is less incongruous than would be similar dabbling with the courts, say.

Sec'y Wilson may have his faults; but the suggestion of removing him to appoint to a cabinet position in his stead Congressman Scott of Kansas, chairman of the committee on agriculture though he may have been, is so wildly grotesque as to rise hardly to the level of a good joke.

Do all your business as direct as possible; draw through consignee's bank when possible; request your own bank, when it handles your papers, to forward them promptly. Remember that nothing can be done with your shipment until the shipping papers arrive, and that every day's, or even hour's, delay may cost you a lot of money.

It is hoped the republication on another page of Circular 32, B. P. I., U. S. Dept. of Agri., entitled "Moisture Content and Shrinkage in Grain," will be found useful to the trade who hitherto have been unable to reconcile the shrinkage in weight with the lowering of the moisture contents of grain. The problem is not a difficult one arithmetically considered; but as Mr. Duvel has done the work for the trade of computing the relative percentages, all the latter have now to do is to preserve the tables attached to his explanation of the method of computing the relations of moisture and shrinkage and apply them to the particular cases in hand as they arise.

If object lessons in "coopering" are still permissible, an effective one might be that of J. J. Davis, manager of the Galveston Wharf Company, who recently issued an annual report showing the number of leaky cars unloaded at Galveston for the crop season of 1908-09. Of 7,429 cars unloaded, 4,076, or 54.9%, were found in a leaking condition, some in more than one place. Leaks at grain doors took precedence, 49%, against 51% for all other possible places. As the best advice under the circumstances, Mr. Davis can only recommend the booklet issued some time ago by the Chicago Weighing Department recommending the lining of grain doors with paper or cloth as a part of the coopering process. This is inexpensive and it is effective. Why don't you, Mr. Reader, stop losses of this kind in that way?

The report of O. A. Talbott, of the transportation committee of the Western Grain Dealers' Association, is an exceedingly valuable document, whether it is considered from the point of view of the carrier's liability or the shipper's duty to himself. We are inclined to think, however, Mr. Talbott rather over-values the carrier's liability as a remedial factor in the lessening of losses in transit. No doubt his estimate of that liability is correct; but the problem is to stop the losses rather than to collect pay for them; and while therefore we would not be understood as encouraging the notion that the carrier should be relieved of any proper burden, it may well be asked whether the taking of more pains by the shipper himself to prepare cars to prevent loss in transit would not be more profitable to himself than

to use less diligence and rely on the legal liability of the carrier as his remedy for such losses. We merely present the thought for consideration.

Atlanta grain dealers are confident the I. C. C. decision and order cancelling the "elevation allowance" and "rebilling" (within six months) privileges at Nashville have made an opening in the former city for the building up of a genuine wholesale grain business. One enthusiastic reporter has already seen in his mind's eye the contractors rushing to completion gigantic grain transfer houses and Atlanta transformed into a busy mart for grain, thronged with the buyers of the Atlantic Coast Southeast. These rose-colored visions are sometimes disappointing realities; but apparently the Atlantans will have an opportunity after January 1 to show their mettle in going after this business.

The movement of some of the grain exchanges to slightly increase the commission charges for handling grain, is justified by the higher prices of the cereals and the consequent greater capital required to do business—to handle the same volume of business, or number of bushels. For example, the *Wall Street Journal* estimates that based on the calculations of the crop reporters, at current prices it will require about \$500,000,000 more money to handle the wheat, corn, oats, rye, barley and flax grown in 1909 than it did for the crop of 1908. The terminal markets must finance this great commerce and trade, and it is but right that the producers and consumers should pay the expense thereof.

In connection with the arbitrary attitude of many railroads in the West on the elevator site lease question, does it never occur to the railroads that it might be put up to them to provide and operate elevators for local buyers of grain, just as they build warehouses for receiving, storing and shipping merchandise? In a final analysis one certainly is as legitimate a function of a railroad as is the other, except that the courts have discouraged the principle of permitting railroads to act also as warehouse men. But suppose certain farmers, instead of building their own houses, like regular dealers, should go to the legislatures, as they do in the Canadian West provinces, and get laws requiring the roads to provide loading places—what then?

The effect of 1908 prices of cereals was shown in the shrinkage of our exports of breadstuffs for the fiscal year 1908-09, which amounted to \$54,697,543 less than in 1907-08, the actual total having been \$150,653,216 in 1908-09 against \$205,350,759 in 1907-08. Only twice in the eleven years, 1898 to 1909, has there been a smaller total of breadstuffs exports, to wit, \$101,107,417 in 1904-05 and \$142,710,484 in 1903-04, two short crop years. Since other things being relatively equal, that nation will export most whose prices are lowest, the fact is brought home to us forcibly by this showing that the competition to feed Europe is widening so far as the U. S. is concerned—we no longer "command" the market, nor are likely to do so again, in the face of the Argen-



tine's annual extension of her cereal acreage and the improved agricultural conditions in India and Australia.

The American tendency to megalomania is again seen in the plan now in course of incubation at Des Moines to merge the Iowa Corn Growers', the Iowa State Dairy and Iowa Horticultural Associations for the purpose of a "big show" at Des Moines. From the point of view of the Des Moines promoter this is "great stuff"; but is it conducive to that progress in cereals and grass culture that has hitherto been the object of the Corn Growers' Association? One may doubt it, seeing that a multiplicity of subjects leads naturally enough to a weakening of the interest in any particular one. It would be a great misfortune if the original winter "short course" and the accompanying corn show at Ames were to suffer through this effort to get up a spectacle at Des Moines.

Those of our readers who may happen to be interested in the South American trade may be glad to know that the July issue of the *Monthly Bulletin* of the International Bureau of the American Republics is the "Annual Review" number of that publication, and that it contains a very carefully prepared summarized statement of commercial, material, business and economic conditions in the twenty Latin-American Republics from Cuba and Mexico south to Argentina and Chile. A careful perusal not only of the general introduction but of the data under each country will disclose interesting and instructive facts concerning the progress and development of these countries, which are attracting more than ever the attention of the world because of their large material possibilities. This issue was a little delayed in delivery because the forms were held open up to the last moment, in order to receive the latest statistical reports from the different countries, some of which only arrived at the office of the International Bureau in the very last days of July.

It is said to be on the administration program to reduce the Commerce Commission to a quasi-judicial status with power to adjudicate on matters brought before it, which shall have previously been investigated by the Department of Commerce and Labor. As the President complains that the functions of the several departments overlap too much already, one doesn't quite see how it will facilitate matters much for a department to investigate a case and then have it come before the Commission which must itself also investigate the case before it can arrive at a proper judicial decision upon its merits. Another feature which it is said to be on the program to incorporate in the commerce act, is to give the Government power to control the freight classifications made by the railroads. It is found by practice that the effectiveness of the interstate commerce law is seriously impaired by the complete control which railroads maintain over classification, as witness the effect of classification on the hay rate. In that case it was necessary only to arbitrarily raise the classification in order to very largely increase the rate; and unless the Supreme Court of the U. S. should conclude

to rehear that case and come to a decision reversing the lower court's ruling that the Commission has no lawful control whatever over either rates or classifications, there is no way for shippers to obtain redress from an arbitrary change of the classification and the excess expense such change entails on him.

### THE CROP REPORT.

In spite of the heated rejoinder of the *Price Current* to Pres. Groce's strictures to the Ohio grain dealers upon the crop report, which the *Price Current* characterized as "loose talk and unfounded assertion," and despite the recent personal defense by Secretary Wilson himself of his famous attack on Mr. Patten last spring, the Secretary has not been entirely restored to public confidence as a good guesser. Mr. Wilson may have been right in his estimate of the quantity of wheat in the country, worth only a dollar a bushel, but it is undeniable that Mr. Patten made a "pot of money" proving the Secretary was wrong in both particulars.

But the crop report can never be made entirely satisfactory to all concerned. Only the other day the Southern rice growers turned most savagely on the Secretary because he reported the rice acreage too big by 75,000 acres and the condition too high. The fact is both the Secretary and the farmer and planter take the crop report too sordidly, in a purely mercenary way, just as though there were not "many a slip 'twixt cup and lip" of the Secretary's predictions and the consumer's realization. Wherefore one might suggest that the taking of a new tack by the report makers might be restful to all concerned—clothing this peculiar formulation of Nature's performances from month to month with a guise of poetry, after the manner, let us say, of a recent "grain and flour" report by a well-known firm at Bristol, England, who prepared the minds of their readers for their "survey of conditions" by remarking that—

The land is full of the inexpressibly sweet scent of new-mown hay, which, next to the bean flower when it gives off its perfume in the silvery haze of a June morning, is perhaps the most refreshing of Nature's restoratives. But we must not forget the delicate wild thyme when pressed or trodden under foot, nor the exotic refinement of "fingers-and-thumbs," which many poor mortals tell us have no scent at all. They will go through life suffering from the same delusion; and the farmer himself is thinking much more about the monetary side of his vocation than about the subtle delights of his environment. Men and horses are busy carrying the crop, which everyone is anxious to secure ere the weather change once more. The quality is of necessity frequently inferior, though it is yet hoped that actual disaster has been escaped. If so, the year is likely to prove a prosperous one to agriculture generally, for wheat still holds up a bold head on an upright stem, fruit is promising a bumper crop, and, while barley is, perhaps, unusually late, oats have every appearance of being a fair crop.

Now, is not all that quite as accurate as any guess at "condition" or comparison of acreage with a normal that is checked up but once in ten years and is purely ideal for at least seven years out of the decade? Crop conditions, like happiness, are in the last analysis largely a "state of mind"; and even an irate rice planter might forgive an official "enormous crop" guess were the Secretary to first capture his imagination by a shrewd reference to the "subtle delight of his environment."

## IN THE COURTS

J. L. Easton, receiver for the Pless Hay and Grain Co., Bellingham, Wash., estimates that the creditors will receive about 30 per cent of their claims.

W. Z. Sharp of Sioux Falls, S. D., has been appointed receiver for the Plymouth Elevator Co., which has been operating about a dozen elevators in South Dakota, Iowa and Minnesota. Liabilities are put at \$55,000 and over; assets, \$40,000.

Emmet Gough, of Newport, Ky., on July 14 was appointed temporary receiver for the grain and seed firm of Freeman & Linnig at Lexington, Ky., against whom a petition in involuntary bankruptcy was filed by the C. & O. R. R. Co. and other creditors.

A petition in involuntary bankruptcy was filed in the United States District Court at St. Louis on July 20 by the Picker & Beardsley Commission Co., the Interstate Warehouse and Elevator Co. and the Corno Mills Co. against the St. Louis Hay and Grain Co.

A temporary injunction was issued at Dowagiac, Mich., on July 22, restraining the Pears East Grain Co. from moving the Grand Trunk grain elevator, which had been sold a few days before, and work preparatory to the removal was stopped. The Grand Trunk brings the action and the bill is directed against Ruluf Peck and Charles Pears.

Harry Cuddeback has brought an action against the Cuddeback Grain Co., of Toledo, asking for the appointing of a receiver and the dissolution of the corporation. Mr. Cuddeback alleges that the corporation cannot meet its fixed charges and that it is not already insolvent it is in danger of becoming so, and that the purposes for which it was incorporated have not been realized.

The United States Federal Circuit Court of Appeals, on July 27, affirmed the decision of the lower court in the case of the Government against Herbert Robinson, John L. Layne and F. E. Holliday, who were convicted of swindling in Minneapolis under the disguise of a legitimate grain and broker agency business. The men must pay a fine of \$5,000 each, in addition to which they must serve a two years' term in the Stillwater penitentiary.

On the second trial, a judgment for \$4,500 was rendered at Granite Falls, Minn., against the Van Dusen Elevator Co. in favor of M. Kerlin, who sued for damages growing out of the death of his son, a boy of sixteen, who was employed by the company to operate a wood saw at Canby two years ago. At the first trial Kerling secured a verdict for \$1,200, but it was set aside by the Supreme Court. The boy is alleged to have been killed by reason of an unprotected shaft upon which a broken collar was fastened. When he reached for a stick his coat sleeve was caught in the shaft, causing death.

A new trial has been granted by the Supreme Court of the case of the Woodworth Elevator Co. vs. F. A. Theis et al. at Fergus Falls, Minn. It was claimed that Theis, who had charge of an elevator at Parkers Prairie on the same side track as that of the Woodworth Company, had taken a car of wheat from the wrong elevator, and the Woodworth people sued for its value. The lower court held that the evidence was not sufficient to justify the submission of the case to the jury, and ordered a verdict for the defendants. The Supreme Court holds otherwise, and granted the motion of the plaintiff company for a new trial.

A petition in involuntary bankruptcy was filed at Nashville, Tenn., on August 2 by Mrs. Louisa Roan et al. against the Kendrick-Roan Grain and Elevator Co. E. C. Hawkins was appointed receiver with bond of \$60,000. The claims amount to \$33,081. Attached to the petition was the certificate of C. Perry Snell, president of the company, reciting that the company through its president admits its insolvency and willingness to be adjudged a bankrupt. This action of the president was recommended by the board of directors. The bankrupt company has been conducting a grain and elevator business on Centennial Avenue in West Nashville.

John Hensel, manager of the Greer-Rochdale Co., was arrested recently on complaint of certain stockholders, at Greer, Idaho, charged with a felony in selling grain from the warehouse and being unable to deliver the grain when the warehouse receipts were presented. Recently the Vollmer-Clearwater Co. brought suit against the Greer-Rochdale Co. because the defendant, a co-operative concern, could not deliver grain called for by warehouse tickets held by the Vollmer-Clearwater Co. Following this suit the arrest of Hensel serves to complicate the affairs of the concern and to bring the quarrel between members of the company and the manager into the courts. This arrest is the first action brought under the grain law passed in 1907, which provides that any warehouseman who refuses or fails to deliver the grain called for by warehouse tickets issued by the warehouse company is guilty of a felony.



## TRADE NOTES

C. T. Thorbus, one of the principal owners of the Grain Separator Co., Sparta, Wis., has become sole owner of the property, and it is announced he will enlarge the plant.

The National Automatic Scale Company of Bloomington, Ill., is now sending out its scale in its improved form. They announce that the grain man takes absolutely no chances on installing the National Scale as it is sold on approval.

Moulton & Evans, of Minneapolis, Minn., are experiencing a large increase of orders for the Evans Controllable Wagon Dump over last year. Its automatic locking device and other special features have made it very popular with the grain trade.

The Fosston Manufacturing Co., of St. Paul, Minn., manufacturers of the New Process Cleaner and Separator, have a special catalogue which they will mail on request. It tells all about their cleaners and describes fully the various points which have given the machine its great popularity.

The Hagan Gas Engine & Mfg. Co., of Winchester, Ky., is finding a constantly increasing demand for the Hagan Gas and Gasoline engines. They recently established a wholesale agency for northern Texas and northern Oklahoma with the Briggs-Weaver Machinery Company of Dallas, and contracted with H. A. Murphy, of Marshallville, for the entire state of Georgia.

The Johnson & Field Mfg. Co., of Racine, Wis., recently shipped one of their No. 5 Separators to Mexico City, with the result of an immediate duplicate order. Sales of the No. 5 Separator have been especially large to grain men of Dakota, Iowa and Kansas, and testimonials which the company has received show that users are greatly pleased with the work of this machine.

The American Machinery & Construction Co., of 103 West Water Street, Milwaukee, Wis., combine very many distinctive and special features in their American Grain Cleaner. This machine has given the greatest satisfaction in all elevators and warehouses where it has been installed and prospective buyers are invited to write the manufacturers for complete detailed information regarding it.

The Russell-Miller Milling Co., of Minneapolis, Minn., has placed the order with the Minneapolis Steel & Machinery Co., of Minneapolis, for the power plant equipment for the new mill at Billings, Mont. The installation will consist of a 12 & 26x36-inch tandem compound Twin City Corliss Engine, 12x11-inch high-speed engine, evaporative surface condenser, 50 and 55 K. W. generators, boiler feed pump, piping, etc.

This age of specializing has concentrated both capital and brains on special machines and appliances. The Hall Distributor Co., of Omaha, Neb., have made a special study of the elevating and distribution of grain in the elevator and in a small brochure they call attention to the new Hall Special Elevator Leg. It is fully illustrated, showing how and why the "Hall Way" is a good way. It will be mailed on request.

Moulton & Evans of Minneapolis have secured the contract to build a terminal elevator of one hundred thousand bushels' capacity at Council Bluffs, Iowa, for the Middle West Elevator Company of Omaha. The elevator will be equipped with electrically operated machinery capable of handling twenty-five cars of grain per day. J. R. Hale & Sons of Nashville, Tenn., are the principal owners of the Middle West Elevator Company, which was recently incorporated to do business at Omaha.

The Sykes Steel Roofing Co., of 114 W. 19th Place, Chicago, are sending the trade a booklet containing illustrations of the different types of fire-proof windows which they manufacture. All windows manufactured by the company have hollow metallic frames and sash and are made under the supervision of and in accordance with the requirements of the Laboratory of the National Board of Fire Underwriters. Each window bears a label issued by the Laboratory, testifying to the fact that

it is approved and guaranteeing the lowest rate of insurance obtainable on building and contents.

As an evidence that the Kennedy Car Liner is constantly growing in favor with grain dealers, Fred W. Kennedy, Shelbyville, Ind., manufacturer, announces that 100 per cent more Kennedy Car Liners were sold since June 1, 1909, than during the same period of 1908, and 1,000 per cent more than in the same period in 1907.

It is not often that a more attractive 20 page catalogue reaches our office than that received this month from the Philip Smith Mfg. Co., of Sidney, Ohio, manufacturers of grain cleaning and handling machinery. Handsome cuts in color on enamel paper shows their lines of machines commencing with the Ohio Oscillating Corn and Grain Cleaner and ending with their Controllable Worm Gear Wagon Dump. They will be pleased to mail the catalogue to all who want to know more about the "Ohio" line of machines.

The Huntley Mfg. Co., of Silver Creek, N. Y., manufacturers of Monitor Separators, have been distributing to the trade for some time past some especially attractive as well as useful advertising novelties. The piece de resistance, however, is one they are now sending out in the shape of a crystalloid hanger, displaying the full line of their new improved machines for elevator and warehouse work. They are suitable for office decoration and for a short time will be sent free on application to all elevator owners and operators.

The Government has recently placed an order with The Foos Gas Engine Co., of Springfield, Ohio, for six of their Vertical Engines to be used in the operation of locks on the Ohio River. The locks are operated by air, the four engines for driving the compressors being of 100 horsepower each, and the smaller ones used for auxiliary apparatus. The engines specified are the regular Foos Vertical Three-cylinder Single-Acting Engines, using natural gas for fuel. The power requirements will be very exacting, and the reliability of the engines installed must be beyond question.

### A RUSH FOR WHEAT.

A merry war is on between river steamers over the wheat carrying trade of Calhoun County, Ill., says the St. Louis Republic. The county is rich in the golden grain this year, and sacks are piled high on landings.

The first boat to the pile generally gets it, and the race is on from morning till night. A penny a sack premium is paid the roustabouts to hustle the sacks on the steamers, and farmers come from miles around to see the fun.

Two of the steamers came down the stream July 24 loaded till their boiler decks were almost awash, the wheat being carried to St. Louis.

The roustabouts on these steamers are paid \$50 a month salary and get a penny a sack premium. Each time a negro passes with a sack of wheat on his shoulders a penny is dropped into his hand, and some of the roustabouts clear \$2 a day extra pay. A sack of wheat weighs 135 pounds, and it takes a good strong man to tote 200 of them in a day. After the landing is left a few of the negroes generally get all the pennies, a pair of bones deciding the ownership of the premium money.

Omaha's first car of new Nebraska wheat arrived on July 16 from Wabash. It graded No. 2 hard and was sold to the Nebraska-Iowa Grain Company for \$1.18.

New Orleans in July exported 170,621 bushels of wheat and \$17,142.48 bushels of corn. The wheat went to Bremen (90,621 bus.) and to Liverpool (80,000 bus.), while the corn all went to Hamburg.

Cairo, Ill., has four grain elevators, to wit, the Illinois Central, or Cairo, Elevator, the Halliday Elevator, the Redman-Magee Elevator, and that of the Cairo Milling Company. Thistlewood & Co. These houses have now a total elevator capacity of 1,200,000 bushels, considerably greater than that of Louisville. The Cairo Elevator was recently leased to the Armour Grain Co.

### ARBITRATIONS.

For copies of the following decisions by the Oklahoma Grain Dealers' Association committee, this editor is indebted to the courtesy of Secretary G. J. Gibbs, of the Texas Association.

Texas Grain & Elevator Co. vs. J. E. Farrington.—Mr. Farrington being disqualified to sit on the Board, Mr. R. H. Drennan was agreed upon as the third party for the trial of this case.

This case was submitted to the board on the papers, evidence and arguments of the parties. It is found that on Sept. 30, 1908, the Texas Grain & Elevator Co. bought of J. E. Farrington three cars of white corn at 59c f. o. b. Anadarko, shipment this week, destination Memphis, weights and grades Memphis. It appears that Mr. Farrington had sold quite a good deal of corn to the Texas Grain & Elevator Co. and others for Memphis shipment and had come to the conclusion that he was not getting fair treatment from the Memphis parties on his corn and failed to ship the three cars. This contract would have expired on October 3, but it seems not to have been canceled until October 9th, 1908, when Mr. Farrington wrote to Texas Grain & Elevator Co. that he would ship the corn anywhere else that they might request but would not ship it to Memphis. The Texas Grain & Elevator Co. claim to have had this corn sold to Davis & Andrews at 7c; but this contract was not canceled until October 13, 1908, without any apparent loss to the Texas Grain & Elevator Co. The Texas Grain & Elevator Co. did not buy in the corn to fill their contract nor did they take any other steps to close the contract on the basis of the Grain Dealers' rules, but claimed the right to recover of Mr. Farrington a profit of 7c per bushel, which they would have had in the corn had it been delivered and they had filled their contract with Davis & Andrews.

J. E. Farrington claims that the contract was not canceled and under Rule 7 of the Oklahoma Grain Dealers it was in force until the 3rd of November and that within that time he offered to ship the corn. We find that the contract was canceled by J. E. Farrington's letter of October 9th. This letter should have reached the Texas Grain & Elevator Co. on the 10th. Under the rules established by this board it was the duty of the Texas Grain & Elevator Co. to then buy in the corn to fill this contract. This board is not willing to establish a precedent by allowing damages in such a case on a basis of the profit they claimed to have had on an unfilled contract. We hold that it was their duty, when they had notice of Mr. Farrington's cancellation of the contract, to have bought in corn and proceeded to recover loss; and we find that they could have done this on the basis of 73c in the Memphis market, and we allow them damages on the basis of this rate, which makes a net loss to them of 3c instead of 7c as claimed by them, which, on 3,214 bushels of corn, the basis fixed by them, makes \$96.42. We, therefore, give judgment in favor of the Texas Grain & Elevator Co. and assess the cost of this arbitration against J. E. Farrington.

Norris & Company vs. R. H. Drennan Grain Co.—Norris & Co. claim that on October 17, 1908, they bought of the Drennan Grain Co. by 'phone, 5,000 bushels of wheat and mailed confirmation of same to Drennan. Drennan denies any 'phone conversation; denies that he ever made any sales as claimed, or that he mailed any confirmation to Norris & Co., or received any confirmation of said sale from Norris. Norris does not claim that they received any confirmation of sale from Drennan Grain Co.

Norris & Co. offered evidence to show that he mailed such confirmation and took steps to trace same through the post office, but failed to show that same was ever received by Drennan Grain Co.

Drennan Grain Co. offered evidence to show that no such confirmation ever came to him or to his office. It is incumbent upon complainant to show a contract of sale before there can be any recovery, and we fail to find that any sale has been shown as claimed in this case. No contract having been shown, we are bound to find in favor of the defendant.

We, therefore, give judgment against Norris & Co. for the costs of this arbitration.

Attest: C. F. Prouty, Secretary, March 4, 1909.

WHIT M. GRANT,  
W. W. RANDELS,  
J. E. FARRINGTON.

All interior dealers recognize the importance of quick handling of grain and particularly the new; but many fail to recognize that the forwarding of the original bill of lading is an important factor contributing to prompt handling at terminal markets. We desire, therefore, to impress upon all our friends the necessity for forwarding to us the original B/L with the greatest possible dispatch for all grain just as soon as it is loaded. Where the B/Ls are attached to drafts, the banks should also be requested never to delay the forwarding of the draft and the documents attached.—Pope & Eckhardt Co.



## SOUTH AFRICAN CORN.

The following grading regulations for South African corn, crop of 1909, as prescribed by the Natal government will be interesting, no doubt, to American dealers in corn:

Choice White Flat (Dent)—To be flat, sound, dry, and reasonably clean, and not to be deprived of its grade by reason of an occasional red or discolored grain.

Choice Yellow Round (Flint)—Similar to the above, except that it must be round (flint).

F. a. q. White Flat (Dent)—To be dry. The grains may be irregular in size as long as they are flat; and a reasonable quantity, not more than 8 per cent, may be yellow or discolored grains.

F. a. q. White Round (Flint)—Similar to above, except that it must be round (flint).

Choice Yellow Flat (Dent)—Must be flat, dry, sound, well cleaned, and is not to be deprived of its grade by reason of an occasional white or discolored grain.

Choice Yellow Round (Flint)—Similar to above, except that it must be round (flint).

F. a. q. Yellow Flat (Dent)—Must be flat, sound, dry, and reasonably clean, and up to 8 per cent of white or discolored grains should not deprive it of its grade.

F. a. q. Yellow Round (Flint)—Similar to above, except that it must be round (flint).

Choice Mixed—To be dry, sound, and reasonably clean. The Maize may be round or flat. If the sample is mainly white, yellow Maize up to 20 per cent may be allowed; if the sample is mainly yellow, white Maize up to 20 per cent may be allowed.

F. a. q. Mixed—Should consist of dry, round, or flat Maize, or a mixture of both chiefly yellow and white Maize, and may contain up to 30 per cent of blue berries.

Note—In each of the foregoing cases below the standards set for f. a. q. will be regarded as below grade.

Enquiries to be addressed to Commercial Agent, Natal Government Agency, 26 Victoria street, London, S. W.

The first wheat harvested in the Northwest reached Minneapolis on August 2, when car No. 53,680 of the Milwaukee road was hauled into the yards. The wheat was cut from a field about midway between Sioux Falls and Canton, S. D., and was loaded at Canton. It was consigned to the T. M. McCord Company. A sample was shown on 'change. It was winter wheat, grading No. 2 hard, with the extraordinary test weight of 61½ pounds to the bushel. No finer winter wheat of the grade was ever received at Minneapolis.

## IMPORTS AND EXPORTS FOR 1908-9.

The tabulation of statistics of the foreign commerce of the U. S. for 1908-9 (year ended June 30, 1909) shows the following totals:

| IMPORTS.                      |    | 1907-8        | 1908-9.         |
|-------------------------------|----|---------------|-----------------|
| Free of duty.....             | \$ | 525,603,305   | \$ 599,556,639  |
| Dutiable .....                |    | 668,738,481   | 712,363,585     |
| Total .....                   | \$ | 1,194,341,792 | \$1,311,920,224 |
| Per cent free.....            |    | 44.01         | 45.70           |
| Total amount of duties paid.. | \$ | 286,113,130   | \$ 301,209,863  |

| EXPORTS.                |    | 1907-8        | 1908-9.         |
|-------------------------|----|---------------|-----------------|
| Domestic products ..... | \$ | 1,834,786,357 | \$1,638,355,593 |
| Foreign goods .....     |    | 25,981,909    | 24,655,511      |
| Total .....             | \$ | 1,860,773,346 | \$1,663,011,104 |

| IMPORTS OF GRAIN, ETC.                                |    | 1907-8     | 1908-9.      |
|-------------------------------------------------------|----|------------|--------------|
| Barley, bus.....                                      |    | 199,741    | 2,644        |
| Corn, bus.....                                        |    | 20,312     | 285,065      |
| Oats, bus.....                                        |    | 364,307    | 6,666,982    |
| Rye, bus.....                                         |    | 17         | 51           |
| Wheat, bus.....                                       |    | 341,617    | 40,582       |
| Total breadstuffs, including macaroni, sago, etc..... | \$ | 7,138,214  | \$ 9,454,414 |
| Hay, tons.....                                        |    | 10,063     | 6,712        |
| Clover seed, lbs.....                                 |    | 20,659,396 | 13,786,451   |
| Flaxseed, bus.....                                    |    | 57,419     | 593,668      |
| Other seeds, value.....                               | \$ | 3,976,146  | \$3,523,390  |
| Beans and dried peas, bus..                           |    | 1,657,401  | 3,355,405    |

| EXPORTS—GRAINS, ETC.          |    | 1907-8      | 1908-9.        |
|-------------------------------|----|-------------|----------------|
| Barley, bus.....              |    | 4,349,078   | 6,580,393      |
| Buckwheat, bus.....           |    | 116,127     | 186,702        |
| Corn, bus.....                |    | 52,445,800  | 35,853,412     |
| Oats, bus.....                |    | 1,158,622   | 1,510,320      |
| Rye, bus.....                 |    | 2,419,958   | 1,272,550      |
| Wheat, bus.....               |    | 100,371,057 | 66,923,244     |
| Flour, bbls., rye.....        |    | 4,105       | 3,857          |
| Flour, bbls., wheat.....      |    | 13,927,247  | 10,521,161     |
| Total breadstuffs, value..    | \$ | 215,260,588 | \$ 159,929,221 |
| Hay, tons.....                |    | 77,281      | 64,641         |
| Malt, bus.....                |    | 224,991     | 163,230        |
| Corn oil-cake, etc., lbs..... |    | 66,127,704  | 53,233,890     |
| Cotton oil-cake, lbs.....     |    | 929,287,467 | 1,233,750,327  |
| Flaxseed oil-cake.....        |    | 696,135,362 | 682,764,545    |
| Corn oil, gals.....           |    | 3,659,330   | 3,258,889      |
| Cotton oil, gals.....         |    | 41,019,981  | 51,087,329     |
| Rice, lbs.....                |    | 2,195,947   | 1,560,531      |
| Rice bran, meal, etc., lbs..  |    | 26,248,468  | 18,944,898     |
| Clover seed, lbs.....         |    | 3,547,747   | 16,186,133     |
| Flaxseed, bus.....            |    | 4,277,313   | 882,899        |
| Timothy seed, lbs.....        |    | 25,550,134  | 23,346,614     |
| Other grass seeds.....        |    | 495,245     | 474,519        |
| Beans, dried peas, bus.....   |    | 306,939     | 298,209        |

## RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of July, 1909:

BALTIMORE—Reported by H. A. Wroth, Secretary of the Chamber of Commerce.

| Articles               | Receipts  |           | Shipments |           |
|------------------------|-----------|-----------|-----------|-----------|
|                        | 1909      | 1908      | 1909      | 1908      |
| Wheat, bushels.....    | 1,145,006 | 2,113,636 | 332,000   | 1,483,555 |
| Corn, bushels.....     | 163,395   | 154,420   | 17,515    | 23,340    |
| Oats, bushels.....     | 219,770   | 281,564   | 190       | 632       |
| Barley, bushels.....   | 487       |           |           |           |
| Rye, bushels.....      | 81,958    | 11,421    | 29,999    |           |
| Timothy Seed, lbs..... |           | 8,278     |           |           |
| Clover Seed, lbs.....  | 593       | 603       |           |           |
| Hay, tons.....         | 3,604     | 2,311     | 1,298     | 1,009     |
| Flour, barrels.....    | 91,028    | 153,174   | 28,599    | 58,352    |

BOSTON—Reported by James A. McKibben, Secretary of the Chamber of Commerce.

| Articles                | Receipts |         | Shipments |         |
|-------------------------|----------|---------|-----------|---------|
|                         | 1909     | 1908    | 1909      | 1908    |
| Flour, barrels.....     | 97,837   | 100,733 | 19,681    | 18,232  |
| Wheat, bushels.....     | 4,668    | 203,028 | 105,837   | 113,686 |
| Corn, bushels.....      | 98,495   | 52,192  | 5,240     |         |
| Oats, bushels.....      | 303,553  | 352,382 |           | 1,200   |
| Rye, bushels.....       |          | 25,132  |           | 17,089  |
| Barley, bushels.....    | 4,668    |         |           |         |
| Peas, bushels.....      | 2,550    | 1,925   |           |         |
| Millfeed, tons.....     | 1,928    | 1,198   | 5         |         |
| Corn Meal, barrels..... | 720      | 3,180   |           | 820     |
| Oat Meal, barrels.....  | 8,190    | 8,785   | 9,412     | 7,287   |
| Oat Meal, sacks.....    | 3,362    | 7,975   | 2,500     | 4,371   |
| Hay, tons.....          | 12,150   | 6,130   | 535       | 115     |

BUFFALO—Reported by Fenton M. Parke, Secretary of the Chamber of Commerce.

| Articles                   | Receipts  |           | Shipments |         |
|----------------------------|-----------|-----------|-----------|---------|
|                            | 1909      | 1908      | 1909      | 1908    |
| Wheat, bushels.....        | 2,044,216 | 3,013,035 | 676,448   | 723,072 |
| Corn, bushels.....         | 2,354,869 | 2,329,032 | 583,941   | 281,176 |
| Oats, bushels.....         | 915,336   | 1,142,074 | 336,503   | 391,595 |
| Barley, bushels.....       | 499,452   | 96,000    | 177,870   | 68,800  |
| Rye, bushels.....          | 75,000    | 20,000    | 50,555    |         |
| Other Grass Seed, lbs..... | 7,966     | 47,980    |           |         |
| Flax Seed, bushels.....    | 215,000   | 730,290   |           |         |
| Flour, barrels.....        | 712,538   | 6,626,445 |           |         |

CHICAGO—Reported by George F. Stone, Secretary of the Board of Trade.

| Articles                    | Receipts  |           | Shipments |           |
|-----------------------------|-----------|-----------|-----------|-----------|
|                             | 1909      | 1908      | 1909      | 1908      |
| Wheat, bushels.....         | 4,559,050 | 3,041,962 | 1,538,952 | 2,502,437 |
| Corn, bushels.....          | 6,513,900 | 5,051,571 | 5,399,299 | 7,154,902 |
| Oats, bushels.....          | 4,007,260 | 5,221,604 | 5,856,477 | 5,853,442 |
| Barley, bushels.....        | 1,202,200 | 882,550   | 369,632   | 326,305   |
| Rye, bushels.....           | 61,000    | 72,071    | 49,758    | 82,961    |
| Timothy Seed, lbs.....      | 574,670   | 693,687   | 248,100   | 572,663   |
| Clover Seed, lbs.....       | 129,835   | 12,550    | 90,756    | 40,000    |
| Other Grass Seeds, lbs..... | 499,200   | 178,928   | 714,147   | 1,328,735 |
| Flax Seed, bushels.....     | 23,000    | 63,980    |           |           |
| Broom Corn, lbs.....        | 196,600   | 533,315   | 231,469   | 1,088,362 |
| Hay, tons.....              | 21,445    | 17,727    | 883       | 630       |
| Flour, barrels.....         | 508,424   | 633,636   | 493,035   | 582,529   |

CINCINNATI—Reported by C. B. Murray, Superintendent of the Chamber of Commerce.

| Articles                    | Receipts |         | Shipments |         |
|-----------------------------|----------|---------|-----------|---------|
|                             | 1909     | 1908    | 1909      | 1908    |
| Wheat, bushels.....         | 271,113  | 622,278 | 96,884    | 612,528 |
| Corn, bushels.....          | 416,173  | 514,198 | 293,126   | 485,206 |
| Oats, bushels.....          | 398,500  | 395,758 | 141,854   | 167,634 |
| Barley, bushels.....        | 11,000   | 5,010   | 1,000     |         |
| Rye, bushels.....           | 7,864    | 16,890  | 4,048     | 1,166   |
| Malt, bushels.....          | 213,220  | 88,536  | 55,620    | 30,436  |
| Timothy Seed, bags.....     | 61       | 288     | 1,203     | 592     |
| Clover Seed, bags.....      | 680      | 195     | 1,298     | 329     |
| Other Grass Seed, bags..... | 5,904    | 4,559   | 5,315     | 4,614   |
| Hay, tons.....              | 9,007    | 6,310   | 9,215     | 8,557   |
| Flour, bbls.....            | 83,379   | 117,347 | 51,773    | 86,551  |

CLEVELAND—Reported by M. A. Havens, Secretary of the Chamber of Commerce.

| Articles                | Receipts |         | Shipments |        |
|-------------------------|----------|---------|-----------|--------|
|                         | 1909     | 1908    | 1909      | 1908   |
| Wheat, bushels.....     | 51,727   | 417,064 | 1,333     | 10,777 |
| Corn, bushels.....      | 329,789  | 145,796 | 51,962    | 46,333 |
| Oats, bushels.....      | 401,343  | 348,147 | 81,869    | 53,452 |
| Barley, bushels.....    | 7,500    |         |           |        |
| Rye, bushels.....       | 300      |         |           |        |
| Flax Seed, bushels..... | 26       | 100     |           |        |
| Hay, tons.....          | 4,369    | 3,206   | 581       | 146    |
| Flour, barrels.....     | 27,370   | 55,660  | 9,980     | 18,280 |

DETROIT—Reported by F. W. Waring, Secretary of the Board of Trade.

| Articles             | Receipts |         | Shipments |         |
|----------------------|----------|---------|-----------|---------|
|                      | 1909     | 1908    | 1909      | 1908    |
| Wheat, bushels.....  | 83,037   | 104,624 | 2,993     |         |
| Corn, bushels.....   | 205,972  | 201,620 | 104,129   | 156,190 |
| Oats, bushels.....   | 217,698  | 122,904 | 48,146    | 5,274   |
| Barley, bushels..... | 5,639    |         | 680       |         |
| Rye, bushels.....    | 3,035    | 4,750   | 1,000     |         |
| Flour, barrels.....  | 13,836   | 18,800  | 21,860    | 7,200   |

GALVESTON—Reported by C. McD. Robinson, Chief Inspector of the Cotton Exchange and Board of Trade.

| Articles            | Receipts |      | Shipments |        |
|---------------------|----------|------|-----------|--------|
|                     | 1909     | 1908 | 1909      | 1908   |
| Wheat, bushels..... |          |      |           | 16,000 |
| Corn, bushels.....  |          |      | 85,714    |        |

MILWAUKEE—Reported by H. A. Plumb, Secretary of the Chamber of Commerce.

| Articles                | Receipts |         | Shipments |         |
|-------------------------|----------|---------|-----------|---------|
|                         | 1909     | 1908    | 1909      | 1908    |
| Wheat, bushels.....     | 388,474  | 677,000 | 92,653    | 432,616 |
| Corn, bushels.....      | 404,900  | 207,000 | 432,525   | 262,890 |
| Oats, bushels.....      | 505,500  | 670,400 | 400,503   | 450,487 |
| Barley, bushels.....    | 235,200  | 558,833 | 112,339   | 460,856 |
| Rye, bushels.....       | 20,000   | 43,200  | 20,903    | 22,100  |
| Timothy Seed, lbs.....  | 330,052  | 49,940  | 34,025    | 338,335 |
| Clover Seed, lbs.....   | 19,690   | 7,970   | 142,600   | 315,835 |
| Flax Seed, bushels..... |          | 1,050   |           |         |
| Hay, tons.....          | 1,364    | 1,090   | 30        | 12      |
| Flour, bbls.....        | 183,225  | 223,000 | 269,203   | 226,906 |

MONTREAL, QUEBEC, CANADA—Reported by George Hadrill, Secretary of the Board of Trade.

| Articles                | Receipts  |           | Shipments |           |
|-------------------------|-----------|-----------|-----------|-----------|
|                         | 1909      | 1908      | 1909      | 1908      |
| Wheat, bushels.....     | 2,035,258 | 3,289,172 | 2,327,398 | 3,286,563 |
| Corn, bushels.....      | 142,947   | 131,738   | 72,207    | 1,664     |
| Oats, bushels.....      | 167,519   | 445,334   | 35,818    | 58,261    |
| Barley, bushels.....    | 96,802    | 191,074   | 77,236    | 237,987   |
| Rye, bushels.....       |           |           |           |           |
| Flax Seed, bushels..... | 86,955    | 413,285   |           | 105,518   |
| Flour, bbls.....        | 161,879   | 90,325    | 132,025   | 109,678   |

NEW YORK—Reported by H. Heinzer, Statistician of the Produce Exchange.

| Articles                    | Receipts  |            | Shipments |           |
|-----------------------------|-----------|------------|-----------|-----------|
|                             | 1909      | 1908       | 1909      | 1908      |
| Wheat, bushels.....         | 818,800   | 2,204,400  | 478,716   | 1,385,177 |
| Corn, bushels.....          | 533,975   | 291,325    | 52,989    | 25,486    |
| Oats, bushels.....          | 1,403,025 | 1,630,000  | 45,765    | 53,355    |
| Barley, bushels.....        | 52,750    | 153,600    | 0         | 38,890    |
| Rye, bushels.....           | 44,000    | 54,900     | 25,670    | 43,980    |
| Timothy Seed, bags.....     |           |            | 3,359     |           |
| Clover Seed, lbs.....       | 2,299     | 1,046 bags | 4,174     |           |
| Other Grass Seeds, lbs..... |           |            |           |           |
| Flax Seed, bushels.....     | 136,000   | 109,600    | 0         | 51,387    |
| Hay, (in bales).....        | 25,379    | 20,801     | 453       | 8,581     |
| Flour, bbls.....            | 392,927   | 459,184    | 137,385   | 195,673   |

NEW ORLEANS—Reported by H. S. Herring, Secretary of the Board of Trade.

| Articles            | Receipts |         | Shipments |        |
|---------------------|----------|---------|-----------|--------|
|                     | 1909     | 1908    | 1909      | 1908   |
| Wheat, bushels..... | 8,000    | 26,000  | 170,621   | 24,000 |
| Corn, bushels.....  | 82,000   | 188,000 | 58,283    | 74,160 |
| Oats, bushels.....  | 96,000   | 401,865 | 2,021     | 11,580 |
| Hay, tons.....      | 2,444    |         | 315       |        |
| Flour, bbls.....    | 60,536   | 89,173  | 10,681    | 28,092 |

OMAHA—Reported by F. P. Manchester, Secretary of the Grain Exchange.

|                      |           |           |           |         |
|----------------------|-----------|-----------|-----------|---------|
| Wheat, bushels.....  | 838,800   | 1,130,400 | 295,000   | 444,000 |
| Corn, bushels.....   | 1,919,500 | 944,900   | 1,557,000 | 526,000 |
| Oats, bushels.....   | 340,800   | 508,800   | 502,500   | 400,500 |
| Barley, bushels..... | 7,000     | 1,000     | 5,000     | 5,000   |
| Rye, bushels.....    | 5,000     | 2,000     | 5,000     | 2,000   |



# ELEVATOR AND GRAIN NEWS

## WESTERN.

The DeLaney elevator at Mondak, Mont., has been sold.

Geo. R. Roberts is preparing to erect a warehouse at Hartline, Wash.

The Union Warehouse Co., of Dufur, Ore., has been incorporated.

The Reardon Union Grain Co., of Reardon, Wash., has been incorporated.

Balgour, Guthrie & Co., has established a grain office at Pomeroy, Wash.

The Chase Lumber Co. will build a 20,000-bushel elevator at Forsythe, Mont.

The Farmers' Warehouse Co. is building a grain warehouse at Warden, Wash.

The South Palouse Warehouse Co., of Palouse, Wash., has been incorporated.

The Mark P. Miller Co., of Moscow, Idaho, are enlarging their grain warehouses.

There is a movement to organize a farmers' elevator company at Lanark, Mont.

The Rexburg Milling Co. is erecting a 30,000-bushel elevator at Rexburg, Utah.

The Farmers' Union Grain Co., of Spokane, Wash., has decreased its capital to \$10,000.

The Updike Grain Co. of Omaha, has purchased an elevator in Idaho Falls, Idaho.

Eugene Spaulding is erecting a grain warehouse 60x200 feet in size at Almota, Wash.

W. O. Kay, et al., of Ogden, Utah, are building a 65,000-bushel elevator at Portage, Utah.

The Twin Falls Milling & Elevator Co. will build a \$10,000-bushel elevator at Burley, Idaho.

David Robbins, of Salt Lake City, is building a 50,000-bushel elevator in Cache county, Utah.

The Jensen Brothers Milling Co. is building a 20,000-bushel elevator at Brigham City, Utah.

The Caldwell Grain and Milling Co., of Boise, Idaho, will erect an elevator at Meridian, Idaho.

The Farmers' Union has decided upon the construction of a new grain warehouse at Mohler, Wash.

The St. Anthony and Dakota Elevator Co. is contemplating the erection of an elevator at Lakeside, Mont.

The Lyte Independent Elevator at Moore, Mont., is nearly finished. It will have a capacity of 45,000 bushels.

New warehouses are being built and old ones fitted up at Moscow, Idaho, in anticipation of a large crop.

The Imperial Elevator Company of Minneapolis, is contemplating the construction of an elevator at Helena, Mont.

The Farmers' Union at Goldendale, Wash., will purchase warehouses for grain at Goldendale, Centerville and Daly.

The Almira Farmers' Warehouse Co. has leased the warehouse of the Farmers' Grain and Supply Co. at Almira, Wash.

The Western Grain & Brokerage Co., with a capital of \$50,000, has been incorporated at Ogden, Utah, by C. H. Smith and others.

Frank Kunz and R. J. Stevens have formed a company and leased the warehouse of the Farmers' Grain & Supply Co., of Wilbur, Wash.

The Waitsburg Farmers' Union Warehouse Company is erecting two warehouses 50x100 feet, one in Menoken, and the other in Alto, Wash.

The Farmers' Union, of Nez Perce, Idaho, will build a 50x300-foot warehouse in Nez Perce, and another 50x200-feet, four miles west of Nez Perce.

The Independent Elevator at Culbertson, Mont., formerly owned by Nordmarken & Walnum, has been purchased by W. I. Saxton, of Glenburne, N. D.

The Struby-Estabrook Co. has sold the Denver elevator to the Colorado Milling and Elevator Co. An addition to the house is contemplated by the new owners.

E. W. McComas, District Attorney Phillips and W. J. Clarke, all of Pendleton, Ore., have incorporated with a capital stock of \$10,000 to erect a warehouse at Hermiston, Ore.

The Whitman county, Wash., grain firms of Duling & Bishop and A. P. Johnson & Co. have been consolidated with the Northern Grain and Warehouse Co., of Portland, Ore.

Work has been started on four grain warehouses along the route of the Nez Perce & Idaho electric railway, southeast of Spokane. Houses will be built for the farmers' company, the Interior warehouse Co. and L. W. Robinson. President Z. A. Johnson announces that the electric railway will be in operation

in time to handle the grain between Vollmer and Nez. Perce, Idaho.

The Pacific Coast Elevator Co. is building a warehouse at Valley Grove, Wash., 40x300 feet in size, with a capacity of 60,000 sacks, to replace the one destroyed by fire last winter.

The Rochdale Co., Greer, Idaho, having allowed its lease upon the Kerr-Gifford warehouse to lapse, will retire from the field. The affairs of the company are reported to be in bad condition.

The Genesee Farmers' Union Warehouse Co., Genesee, Idaho, has purchased ground on which to erect the 125,000-bushel wheat warehouse which has been decided upon. It will be 60x160 feet in size.

The Grain Growers' Warehouse Co. of Wilbur, Wash., is building a warehouse 60x200 feet in size. This warehouse, together with another which has been leased, will have a total capacity of 250,000 sacks.

The Spokane Grain Co. has leased the property at Pier 4 in Spokane for two years. The company is building an elevator with a capacity of 1,000 tons bulk wheat, with machinery to handle 2,000 bushels an hour.

Tacoma landed the headquarters for the Idaho and Washington Farmers' Union, bidding against five coast cities. This is said to involve the marketing of 10,000 wheat growers, through the medium of eighty warehouses.

The Campbell-Sanford-Henley Co., owner of graineries and elevators in Washington, Oregon and Idaho, has purchased a controlling interest in the Martin dock property in Portland, Ore., with a view to converting it into a modern grain warehouse.

The Bluestem Union Warehouse Co., composed of members of the Bluestem Farmers' Educational and Co-operative Union, has filed articles of incorporation; capital stock \$10,000. The officers are: H. F. Kelly, president; J. M. Sutton, vice-president; Louis Woodyard, secretary-treasurer.

The San Diego Grain and Mill Co., a subsidiary corporation of the Globe Grain and Mill Co., is constructing at Ash Beach, San Diego, Cal., a large flour mill, with grain tanks having a capacity of 140,000 bushels. The Nordyke & Marmon Co., of Indianapolis, has been awarded the contract to supply the machinery to be used in the plant.

The Farmers' Union of Pullman, Wash., having incorporated as the Pullman Union Warehouse Co., with a capital of \$10,000, has leased five grain warehouses from the Gerr-Gifford Co. The houses are located at Pullman, Johnson, Whelan, Busby and Kitzmiller sidings. The officers are: J. M. Reid, president; Ira N. Nye, secretary; M. V. Meeks, treasurer.

The Rocky Mountain Elevator Co., capitalized at \$100,000, with James S. Beil, Charles J. Martin, William H. Dunwoody and John Washburn as officers, has been incorporated. The company will build eight country elevators this season in the Judith Basin, Montana, with a capacity of not less than 25,000 to 30,000 bushels each. They will be used to handle wheat for the Kalispel and Great Falls Mills of the Washburn-Crosby Co., as well as for handling barley and oats in the regular elevator business. Moccasin and Stanford are among the points selected.

## ILLINOIS.

Allenville, Ill., has a new 50,000-bushel elevator nearly complete.

A new elevator is being erected at St. Peter, Ill., for August Borchelt.

The Harney Elevator, at Dixon, Ill., which burned down, is being rebuilt.

A new grain office is being built at Clarksburg, Ill., for J. K. Hoagland.

The elevator of Titus Bros., at Steward, Ill., has been sold to the farmers.

E. H. Farley, of Ottawa, Ill., is preparing to erect an elevator at Baker.

A new elevator is being constructed at Wapella, Ill., for the Rogers Grain Co.

Coulson & Adams, of La Harpe, Ill., have added another story to their elevator.

The Roger Grain Company started up their elevator at Wapella, Ill., on Aug. 4.

The Neola Elevator Co. is remodeling and enlarging its elevator at Hinckley, Ill.

Chas. Fenstermaker, of Walton, Ill., has bought the W. P. Barnes elevator at Amboy, Ill.

M. S. Ferris, formerly of the Reddick elevator has purchased an elevator at Manhattan, Ill.

J. W. Irwin & Co. of Longview, Ill., have just finished the erection of their elevator, the machinery being furnished by the Union Iron Works of Decatur, Ill.

The Farmers' Co. of Rockfield, Ill., has recently completed the erection of a modern grain elevator, which was designed and built by the Reliance Construction Co. of Indianapolis, Ind. The machinery

was furnished by the Union Iron Works of Decatur, Ill.

An elevator is being built on the interurban line at Osprey, between Decatur and Bloomington, Ill.

The Shearer-Nuli Grain Co. has leased its elevator at Saybrook, Ill., to Outlaw & Tuttle, of Saybrook.

The Arenzville-Hagener Farmers' grain Co. has been incorporated in Arenzville, Ill.; capitalization \$20,000.

C. W. Hahnbock and L. T. Elliott have purchased the grain and lumber business at Kemper, Ill., of G. W. Ruyle.

The Farmers' Elevator Co., of Literberry, has purchased the C. W. Savage Elevator at that place; consideration, \$3,000.

The new 30,000-bushel elevator of Morris & Stone, at Allenville, Ill., replacing the one recently burned down, has been completed.

C. L. McMasters, Tuscola, Ill., has just installed a No. 1 Western Gyrating Cleaner, built by the Union Iron Works, Decatur, Ill.

The farmers have taken possession of their recently purchased elevator at Rockford, Ill. Lawrence Parker will be the manager.

The Farmers' Grain and Coal Co. has been organized at Saybrook, Ill., with a capital stock of \$10,000, \$6,475 of which has been paid in.

B. E. Rich, of Kankakee, Ill., has purchased the interest of M. S. Ferris in the elevator at Reddick and has assumed the management.

Krumwiede & Babb, of Buckley, Ill., are tearing down their old elevator, built over forty years ago, and intend to build a modern structure.

The 40,000-bushel elevator of Wayward Bros., at Cooksville, Ill., is approaching completion. It is eighty-seven feet high and will cost \$5,000.

The Burrell Engineering & Construction Co. has the contract for remodeling the grain elevator at Evans, Ill., for B. P. Hill, of Freeport, Ill.

The Rock Island Elevator at Chillicothe, Ill., has been remodeled, including the installation of a new gasoline engine in place of the old steam engine.

The Richmond Milling Co. of Richland, Ill., has recently installed a Western Warehouse Combined Sheller, made by the Union Iron Works, Decatur, Ill.

W. M. Webster, Poplar Grove, Ill., has just installed a Western Warehouse Combined Sheller and Cleaner, made by the Union Iron Works, Decatur, Ill.

The Farmers' Grain Co., of Morrisonville, Ill., has taken over the Hardman Company's property, consisting of two elevators, cribs, etc.; consideration, \$12,000.

The Lacharite Grain Co. of Assumption, Ill., have been making some improvements in their elevator, same being furnished by the Union Iron Works of Decatur, Ill.

The Hennepin Canal Elevator Co., of which F. G. Boydon, of Tampico, Ill., is the manager, has completed the foundation for two elevators near that place along the canal.

The People's Fuel & Coke Co., Galesburg, Ill., has been incorporated to deal in grain, fuel, etc. The incorporators are G. R. Sandberg, E. M. Tappier and E. H. Blaich.

Henry J. Nobbe, Nokomis, Ill., has just completed his new elevator, which is equipped throughout with modern machinery, furnished by the Union Iron Works of Decatur, Ill.

S. C. Bartlett & Co. has sold the elevator at Normandy, Ill., to B. M. Stoddard & Son, of Minonk, Ill. Roy Norman, who was manager for the retiring firm, will continue in that capacity.

Holcomb Bros., of Sycamore, Ill., have contracted with the Burrell Engineering and Construction Co., Chicago, for a new 16,000-bushel elevator at Charter Grove, Ill. It will be equipped with a Fairbanks 8-horsepower Gasoline Engine and a Richardson Automatic Scale.

Chapman Bros. & Wilson of Laplace, Ill., have just completed the rebuilding of their elevator. The building has been thoroughly overhauled and equipped with the latest improved machinery, furnished by the Union Iron Works, of Decatur, Ill., to enable them to handle the coming crop.

It is announced that the Prairie State Elevator Co., of Kankakee, Ill., whose elevator was recently destroyed by fire, will rebuild, and that the new structure will be even larger than the one that was burned down. Insurance amounting to \$43,914.75 has been paid on grain and \$55,000 on the building.

The interest of the Bartletts in Bartlett, Kuhn & Co., at Marshall, Ill., has been purchased by Mrs. Kuhn, mother of Paul Kuhn, who was the active partner in the management of the grain and elevator business of the firm just dissolved. The business, which consists of twenty-seven elevators and



numerous stations where grain is handled, will be known as Paul Kuhn & Co.

The National Elevator Co. has been making some extensive repairs on their elevator at Blue Mound, Ill., and have installed a No. 2 Western Warehouse Sheller, made by the Union Iron Works, Decatur, Ill.

The Barry Milling & Grain Co. of Barry, Ill., have recently purchased from the Union Iron Works of Decatur, Ill., a 360-ft. spiral conveyor and other machinery necessary to convey wheat from their elevator to their mill.

Oscar Jones of Chrisman, Ill., has purchased a large plantation in Mississippi, where he intends to raise corn and begin the erection of an elevator at once. He has placed his order for machinery with the Union Iron Works of Decatur, Ill., and intends to equip his house with up-to-date machinery throughout.

The Farmers' Elevator of Jacksonville, Ill., is building a new grain elevator at Strawn Crossing; capacity, 15,000 bushels. The machinery equipment will include a Union Iron Works Sheller, Monitor Cleaner and Fairbanks 20-horsepower Gasoline Engine. The Burrell Engine and Construction Co. has the contract.

Morris & Stone of Allenville, Ill., have just completed their elevator replacing the one recently destroyed by fire. This elevator is equipped throughout with modern machinery, including a Western Pitless Sheller and Gyrating Cleaner and other machinery, furnished by the Union Iron Works of Decatur, Ill.

H. Lesch & Co., Contractors, of Washburn, Ill., have just completed the large elevator for the Farmers' Grain Co. of Assumption, Ill. This elevator is equipped throughout with modern machinery, including a Western Pitless Sheller and Gyrating Cleaner, and rope drives; the machinery all being furnished by the Union Iron Works of Decatur, Ill.

The elevators formerly belonging to the late firm of J. and F. J. Rapp, of San Jose, Ill., have been sold, as follows. The Winkle Station elevator, one-half interest to Miles Bros., of Peoria, \$2,000; San Jose elevator to Miles Bros., Peoria, \$4,000; the Harness Station elevator to John F. Fryer, \$2,800; the Natrona elevator to the Farmers' Grain & Coal Co., \$1,100.

Thompson & Housh of Moweaqua, Ill., are now operating their new elevator recently built by George W. Morris. This elevator is one of the best equipped and most modern in this section. It is equipped with rope drives and Western Pitless Sheller and Gyrating Cleaner, the entire equipment being furnished by the Union Iron Works of Decatur, Ill.

Calhoun & Curry of Pishgah, Ill., have completed their new elevator. This elevator replaces the one recently destroyed by fire, but has about twice the capacity and is thoroughly modern throughout, being equipped with a Western Pitless Sheller, rope drives, and Western Gyrating Cleaner. The entire equipment was furnished by the Union Iron Works, Decatur, Ill.

E. B. Conover, Virginia, Ill., has just completed his new elevator at Buffalo, Ill. His machinery is driven by three motors and the power is derived from the Traction System. This elevator was designed and the machinery furnished by the Union Iron Works of Decatur, Ill. It is modern in every respect, including a Western Pitless Sheller and Gyrating Cleaner.

#### IOWA.

A farmers' elevator company is being organized at Early, Iowa.

The Western Elevator at Aurelia, Iowa, is now owned by Alexander Frazer.

A new farmers' elevator at Lawn Hill is contemplated by the farmers of that locality.

The Gaza Grain & Supply Co. has been incorporated at Gaza, Iowa, with a capital of \$30,000.

C. C. Grue has disposed of his grain business at Sioux Rapids, and expects to leave that place.

The Jackson Grain Co., of Cedar Rapids, Iowa, is erecting an elevator at Nugent in that state.

The farmers in the vicinity of Lanesboro, Iowa, have purchased the Iowa Elevator at that place.

The Wilkin Grain Co., of Albia, Iowa, has established a branch at Melrose, to buy grain and seed.

S. H. Lamis, of Eddyville, Iowa, is about to build an elevator twenty-eight feet square and fifty feet high.

Owasa, Iowa, has a new farmers' elevator company, recently incorporated with a capital stock of \$2,450.

Tom Ferris has taken charge of the elevator at Humboldt, Iowa, recently purchased of A. T. Montgomery.

The Faulkner Grain and Mercantile Co., of Faulkner, Iowa, has been incorporated with a capital stock of \$50,000.

The old T. J. Holmes & Son grain office and elevator at Marshalltown, Iowa, has been sold to Dr. A. E. Anger. He has taken down the elevator, and

remodeled the office, which is now occupied by a restaurant company.

The Hillshoro Lumber, Grain and Fuel Co., of Hillsboro, Iowa, is building an elevator at that point.

Moore Bros. Co., of Hampton, Iowa, have disposed of their entire line of grain elevators to Minnesota people.

Johnson, Moorehouse & Co. have purchased the elevator and coal business of McVinnie & Bell, at Atlantic, Iowa.

J. J. Grosenbaugh will build an addition to his elevator at Coon Rapids, Iowa, four feet wide and forty feet high.

The Farmers' Elevator Co. has been organized at Gilman, Iowa, with a capital of \$6,000. The company will build an elevator.

Chris Williams has purchased the elevator at Dayton, Iowa, from G. A. Gustafson. Elmer Shostrom will manage the business.

The Charles Dozler Grain Co., of Templeton, Iowa, has been incorporated by Charles L. Dozler and M. J. Daeger. Capital stock, \$15,000.

Joe Musey, of Ft. Dodge, has been elected manager of the Farmers' Elevator Co., at Livermore, Iowa, to succeed W. L. Johnson, resigned.

The contract has been let by the Farmers' Elevator Company, of Walker, Iowa, for the construction of a new elevator, capacity 25,000 bushels.

The Farmers' Elevator Co., of Grinnell, Iowa, has purchased the Kingdon Bros.' elevator at that place. Consideration \$5,000. Possession given Aug. 1.

The Hamlin Elevator at Van Cleve, Iowa, heretofore the property of E. D. Hamlin, of Des Moines, Iowa, has been bought by Ernest Tigges; consideration, \$3,500.

The Farmers' Elevator Co., of Ritter, Iowa, has been incorporated by P. J. Baadhe, C. H. Dougherty, Thomas Beacon, Fred Wolfe and others. Capital stock, \$20,000.

The De Beer & Vanderberg elevator property at Sioux Rapids, Iowa, has been sold to the Button Elevator Co., of Sheldon, Iowa. Oscar Eaton will remain in charge.

A paper at Kanawha, Iowa, states that all the Moore elevators along the I. C. R. R. near that point are for sale by the land company that traded for them during July.

Five new elevators are being established along the new line of railroad from Mason City, Iowa, to Iowa Falls, Iowa, at the following named points: Hurley, Sheffield, Chapin, Hampton and Racine.

The Primghar Farmers' Elevator Co., of Primghar, Iowa, has purchased the Western Elevator Co.'s elevator at that place. The manager for the retiring company, Alex. Stewart, will remain in charge.

The Winnesheik Co. Bank, of Decorah, Iowa, is wrecking its old elevator building at that place, preparatory to building a modern structure in its place. Meyer & Co. will have the lease of the new building.

#### SOUTHERN AND SOUTHWESTERN.

Contract has been let for the construction of an elevator at Caddo, Okla.

The McInturf Grain & Coal Co. has opened an office at Lone Wolf, Okla.

J. H. Cook, of Terrell, Texas, has sold his grain business to G. W. Matthews.

A. Lee Redford has rented the Richards, Mason & Co. elevator at Morganfield, Ky.

Everybody's Gin and Elevator Co., Chickasha, Okla., will rebuild elevator recently burned.

The Greenville Milling Co., of Greenville, Ky., will build an elevator with a capacity of 25,000 bushels.

The Union Warehouse and Elevator Co., of Bay City, Tex., has let the contract for an addition to its warehouse, to cost about \$6,000.

J. E. Farrington, Chickasha, Okla., has just installed a No. 2½ Western Warehouse Sheller, made by the Union Iron Works, Decatur, Ill.

The Custer Mill Co. of Custer, Okla., has recently installed a No. 4 Western Gyrating Cleaner, made by the Union Iron Works, Decatur, Ill.

The Blessing Warehouse and Elevator Co., of Blessing, Tex., will erect a frame warehouse on cement foundation, 160x216 feet in size.

The Krame elevator at Byron, Okla., has been sold to the Cherokee Mill and Elevator Co., of Cherokee. R. E. Fisher will be retained as manager.

E. J. Webb of Geary, Okla., has just installed a Western Pitless Sheller in his new elevator, which was made by the Union Works, Decatur, Ill.

The Farmers' Co-operative Assn. of Okarche, Okla., have recently installed a No. 2 Western Warehouse Sheller, built by the Union Iron Works, Decatur, Ill.

The Interstate Warehouse & Elevator Co. of E. St. Louis, Ill., have just purchased a No. 2A Western Warehouse Combined Sheller. This machine has a capacity of 2,000 bushels per hour, and is the largest

Combined Sheller on the Market. It is made by the Union Iron Works, Decatur, Ill.

H. W. Cole, Waurika, Okla., has recently improved his elevator by installing a Western Pitless Sheller, made by the Union Iron Works, Decatur, Ill.

Wirt & Lyons of Calumet, Okla., are installing a Western Warehouse Sheller and Gyrating Cleaner, made by the Union Iron Works, Decatur, Ill.

The Stamford Mill and Elevator Co. has about completed its elevator at Stamford, Tex. The company will handle milo maize and Kaffir corn.

E. L. Parmlee, Morganza, La., has just installed a No. 4½ Western Warehouse Combined Sheller, made by the Union Iron Works, Decatur, Ill.

A. L. Stanfield of Edgar, Ill., has recently improved his elevator by installing a Western Pitless Sheller, made by the Union Iron Works, Decatur, Ill.

W. W. Brunskill of Ryan, Okla., has recently improved his elevator by the installation of a Western Pitless Sheller, made by the Union Iron Works, Decatur, Ill.

The Monarch Milling Co., Mt. Sterling, Ky., have recently equipped their mill with a Western Mill Sheller of the latest improved type, made by the Union Iron Works, Decatur, Ill.

The equipment for the Strawn Crossing Farmers' Elevator will include a Western Warehouse Sheller, made by the Union Iron Works, Decatur, Ill. This elevator is being constructed by the Burrell Engineering & Construction Co., of Chicago, Ill.

Julius Weis & Co., of New Orleans, La., have placed the contract with the Burrell Engineering & Construction Co. for a new grain elevator at Lake End, La., which will have a capacity of 10,000 bushels. A Marseilles Shuck Sheller will be installed.

The J. H. Pruitt Grain Co. has been organized at Oklahoma City, with a capitalization of \$50,000. J. H. Pruitt, of Lindsey, Okla., is president, and J. W. Dixon, formerly of Hobart, secretary and treasurer. The company will build an elevator and conduct a general grain and feed business.

Colly Stewart, formerly a merchant in Jacksonville, Ala., has erected at that place a warehouse for handling grain, hay, flour, etc., near the Seaboard depot. At one end of the building he has a grist mill for corn, run by electric motor, with a capacity of 10 to 20 bushels an hour.

#### OHIO, INDIANA AND MICHIGAN.

W. F. Close will build a new elevator at Byron, Mich.

The Bryant Grain Co. has been organized at Bryant, Ind., capitalization, \$18,000.

Hyslop & Son, of Onid, Mich., are building a new grain elevator at Pewamo, Mich.

The Davison & Cupp Elevator at Uniondale, Ind., is now finished and doing business.

The Fenton Elevator Co. has been organized at Fenton, Mich., with a capital of \$20,000.

A new elevator has been completed at Midland, Ind., for Charles Patten, of Waneland, Ind.

The Alma Grain & Lumber Co. has started a branch at Cadillac, Mich. John Kneeland is in charge.

Beaver Mills and Grain Co., of Celina, Ohio, has been incorporated by G. P. Nash, with a capital of \$25,000.

C. R. Patton, Waveland, Ind., has recently improved his elevator and installed a Western Gyrating Cleaner.

The Valley Traction Co. will supply electric power for the farmers' elevator, now under construction at Delphi, Ind.

Raub Grain Co. of Raub, Ind., have recently installed a No. 1 Western Gyrating Cleaner, made by the Union Iron Works, Decatur, Ill.

Morrison & Finch of Stockwell, Ind., have just installed a No. 1½ Western Gyrating Cleaner, made by the Union Iron Works, Decatur, Ill.

Arthur Nerreter, of Saginaw, Mich., has bought the Sterling elevator from Jesse Hamlin. Mr. Nerreter was formerly owner of the Standish Flour Mills.

Wm. M. Harman, Wm. J. Ladd, Pat J. Kennedy and Ellard A. Benedict have purchased the elevator at Wadena, Ind. Messrs. Benedict and Ladd will manage it.

F. A. Mull, of Rushville, Ind., has purchased the elevators at Gwynneville, Manilla and Morristown, Ind., which were owned by the late M. C. Burt, of Morristown.

R. S. Stall & Co. of Thornton, Ind., have improved their elevator by the installation of a No. 7 Western Pitless Sheller, made by the Union Iron Works, Decatur, Ill.

The Reliance Construction Co. of Indianapolis, Ind., has just completed a large elevator for J. W. Witt of Lebanon, Ind. This elevator is equipped throughout with modern machinery, including a Western Pitless Sheller and Gyrating Cleaner, and



rope drives; the machinery all being furnished by the Union Iron Works of Decatur, Ill.

The Seeds Grain and Hay Co., of Columbus, O., has increased its capital stock from \$60,000 to \$150,000. E. W. Seeds is general manager.

R. F. Peck and the Pears East Grain Co., of Buchanan, Mich., have bought the old Grand Trunk Elevator at Cassopolis, and are having it improved.

Fred Welch sold his elevator at Fenton, Mich., to the Fenton Elevator Co., a company just formed, with E. I. Isabell, president, and K. P. Kimball, vice-president.

The L. Keilman Co., Dyer, Ind., has been incorporated to construct and operate grain elevators. L. J. L. and H. L. Keilman, P. Gettler and H. F. Kalvalage are the incorporators.

Paul Kuhn & Co. of Terre Haute, Ind., have improved their elevator at Perrysville, Ind., by the addition of a Western Pitless Sheller, made by the Union Iron Works, Decatur, Ill.

J. & S. Emison Co. of Vincennes, Ind., have recently installed a No. 7 Western Pitless Sheller and a No. 0 Western Rolling Screen Cleaner, made by the Union Iron Works, Decatur, Ill.

W. T. Wilford, Bowling Green, Ohio, has been making some extensive repairs in his elevator, including a stand of elevators and other machinery furnished by the Union Iron Works, of Decatur, Ill.

#### EASTERN.

L. Snyder & Son have purchased the feed and grain business of H. D. Tripp at Chestertown, N. Y.

N. Drake, E. A. Drake and N. C. Drake, of Irvington, N. J., have incorporated with a capital of \$100,000, and will deal in hay, grain, straw, flour, etc.

The firm of Bolton & Bronner, grain, flour, feed and coal dealers, of Cooperstown, N. Y., has been dissolved, R. E. Bolton, the junior partner, selling his interest to Louis N. Wood. The new firm will be known as Bronner & Wood.

The Philadelphia Grain Elevator, at Port Richmond, Penn., which for years has been operated by Charles M. Taylor's Sons, has passed to the control of the Philadelphia & Reading Railway. The transaction is said to be the termination of contractual relations between the firm and the Reading. The corporation will remain in business as the Philadelphia Grain Elevator Co. New officials have been elected as follows: W. R. Taylor, president; Jay V. Hare, vice-president; H. E. Paisley, treasurer; O. H. Hagerman, manager.

#### MINNESOTA AND WISCONSIN.

The Western Elevator Co. is building at Dover, Minn.

There is to be a new elevator at Red Lake Falls, Minn.

R. S. Houk will build an elevator at Good Thunder, Minn.

The new Bingham elevator at Seaforth, Minn., is completed.

A farmers' elevator is being erected at Fergus Falls, Minn.

A farmers' elevator company has been organized at Brooten, Minn.

The farmers are now operating an elevator at Greenbush, Minn.

Grieg & Zeeman's elevator at Echols, Minn., is closed for repairs.

Dan Sherman will erect a new elevator on his farm at Prior, Minn.

G. O. Miller has purchased the Atlas Elevator Co.'s plant at Porter, Minn.

The Great Western Elevator Co. is repairing its elevator at Winthrop.

The Farmers' Grain Co. of Clitheral, Minn., are building a new elevator.

C. R. Gosslee has purchased the Peter Plein elevator at Menasha, Minn.

The Milling Co., at New London, Minn., contemplate building an elevator.

The R. S. Houk elevator at Lyra, Minn., burned last year, is being rebuilt.

A concrete foundation is being placed under the grain house at Rogers, Minn.

The Farmers' Elevator Co. has purchased E. S. Moore's elevator at Benson, Minn.

It is reported that the Northwestern Cereal Co. will erect a \$150,000 plant at Beloit, Wis.

The Red Lake Milling Co. is planning to erect elevators at Badger and Roseau, Minn.

The Farmers' Market Co., of Herman, has purchased the Duluth Elevator at Chokio, Minn.

The Foley Milling and Elevator Co. has purchased the elevator at Ronneby from the Cargill Elevator Co. of Minneapolis. The house will be moved to

Foley, Minn., and a feed mill and ware house added to it.

L. T. Hogg has bought the Monarch Elevator at Cyrus, Minn. Possession given on August 1.

An additional scale and conveyor is to be placed in the farmers' elevator at Barnesville, Minn.

De Graff, Minn., farmers have organized a company and will be ready for business on August 1.

The Standard Grain Co., of Superior, Wis., has increased its capital stock from \$25,000 to \$50,000.

A concrete foundation is being placed under the Teweles & Brandeis elevator at Sturgeon Bay, Wis.

The American Grain Separator Co. has been incorporated at Minneapolis, with a capital of \$100,000.

The American Society of Equity say they will erect grain warehouses at Wausau and Marathon, Wis.

J. L. Denhart, of Pipestone, Minn., has purchased the Thompson elevators at Trent, Egan and Colman, S. D.

Hanson & Barzen have sold their elevator at Badger, Minn., to the Farmers' Elevator Co. for \$4,100.

A new house will be erected on the site of the old Western Elevator at Dover, Minn., now being dismantled.

The Farmers' Grain Co., Schleissingerville, Wis., has been succeeded by the Farmers' Supply Co. Capital \$12,000.

A. E. Anderson has taken possession of the elevator at Cottonwood, Minn., purchased by him some months ago.

M. W. Savage is having an addition built to his elevator at Fifteenth and Rollins avenues, S. E., Minneapolis.

C. E. Bird & Co., of Minneapolis, are installing new machinery in the farmers' elevator at Kerkhoven, Minn.

Henry Niedere, formerly of Hastings, Minn., has bought an elevator at Hampton in that state, where he now resides.

The Farmers' Elevator at Pelican Rapids, Minn., has been enlarged by 6,000 bushels greater than its former capacity.

Ferdinand Krueger has traded a quarter section of land in North Dakota for the W. J. Tillotson Elevator at Arco, Minn.

The farmers near Murdock, Minn., have purchased the E. E. Smith elevator for \$6,000. Possession given on August 1.

Jacob Miller, of New London, Wis., has bought the Western Elevator at Hortonville, Wis., taking possession August 3.

C. W. Martin has purchased the La Crosse Grain Co.'s elevator at Grand Meadow, Minn., which he has managed for some time.

The Farmers' Grain and Fuel Co., of Belview, Minn., is building a large corn crib in connection with its grain warehouse.

The farmers living tributary to Wheatville, Minn., have been negotiating for the purchase of the National Elevator at that place.

C. Steinkopf has purchased elevator and sheds of the Crown-Elevator and will engage in the grain business at Buffalo Lake, Minn.

Subscription has been secured for almost the entire \$25,000 of stock of the Farmers' Elevator Co. at Murdock, Minn., just organized.

The Powers Elevator Co. have leased the J. W. Bouck elevator at Royalton, Minn., and are using it in connection with their own at that point.

J. H. Morrill has sold his grain and lumber business at New Lisbon, Wis., to Wm. Talge, of Wonevot. Possession is to be given Nov. 1.

Henry Neidere, of Hastings, has purchased the Rex Elevator at Hampton, Minn., and has taken possession. The house has a capacity of 25,000 bushels.

The Federal Elevator Co., of Winnipeg Junction, Minn., has sold out to the Farmers' Elevator Co., of Dale, and the elevator will be moved to the new site at Dale.

Permit has been issued to George Harper to erect an ironclad grain elevator at Fifth St. and Twenty-fourth Ave., S. Minneapolis. The house will cost \$13,000.

The Farmers' Elevator Co. of Beaver Creek, Minn., has taken over the warehouses of the Booge Elevator Co. H. C. Jordahl has been elected president and L. G. Larson secretary.

The Myrtle Grain Co., of Albert Lea, Minn., has been changed to Speltz Grain & Coal Co. There is no change in ownership, management, capital or personnel of the company.

The grain business of Seidl & Dalton, Minneapolis, has been purchased by S. A. Dalton and James A. Gould under the firm name of Dalton & Gould. Frank J. Seidl is in charge of the Gould Elevator Co.'s business, which formerly had its office with

the Seidl & Dalton Co. The Gould company is owned largely by eastern malting interests.

Caldwell Bros., of Lodi, Wis., have ordered new machinery with which to remodel their grain elevator. The Burrell Engineering & Construction Co., Chicago, are the contractors.

The Mapleton (Minn.) Farmers' Co-operative Association, organized twenty-two years ago, is considering the advisability of making necessary repairs and opening the elevator for this season's buying. A committee was appointed to investigate the matter.

The grain elevator of Daniel Weischler & Son, Inc., at Milwaukee, Wis., being built by the Macdonald Engineering Co., Chicago, is now approaching completion. The storage bins holding 400,000 bushels, have just been finished. It is intended to place the elevator in operation October 1.

The La Crosse Grain Co., successors to the S. Y. Hyde Elevator Co., of La Crosse, Wis., is moving its offices to Spring Valley, Minn. The company owns and operates twenty elevators on the C. M. & St. P. Ry., in southern Minnesota. The company is to be reorganized shortly, but the personnel of the company will remain practically the same as heretofore.

#### MISSOURI, KANSAS AND NEBRASKA.

J. C. Lilly & Co. are building an elevator at Burns, Kan.

E. A. Fulcomer has bought the elevator at Rydel, Kan.

The Central City, Neb., farmers' elevator is completed.

Additions are being built to the West Elevator at Trenton, Neb.

The Benson Grain Co. will build an elevator at Concord, Neb.

G. F. Lierman will build a 20,000-bushel elevator at Hadar, Neb.

M. S. Parker is constructing a feed mill and elevator at Ogallala, Neb.

Rogers & Broughton contemplate erecting an elevator at Bronson, Kan.

The Nebraska-Iowa Grain Co. has completed its house at Milligan, Neb.

L. L. Burchinal has bought the Home Grain Co.'s elevator at Formosa, Kan.

G. G. Wiechen has sold his elevator at Bison, Kan., to N. W. Jones and D. S. Erni.

The Inman Milling Co. has leased the Home Grain Co.'s elevator at Canton, Kan.

Drosselmeier Bros. and M. Bauer, Jr., will erect an elevator at Wathena, Kan.

The elevator of Hill & Cheers at Larned, Kan., recently burned, is being replaced.

The Kansas Grain Co. is rebuilding their elevator recently burned at Kinsley, Kan.

The Middle West Elevator Co., capital \$100,000, has been organized at Omaha, Neb.

F. S. Boone has bought of J. T. Norris a half interest in the elevator at Maize, Kan.

The Nebraska-Iowa Grain Co. is erecting a 30,000-bushel elevator in Ohio, Neb.

A. A. Alley, of the Alley Grain Co., will erect an 8,000-bushel elevator at Mercer, Mo.

The Home Grain Co. elevator at Courtland, Kan., has been sold to Clarence Ainsworth.

F. F. Roby, of the Kearney Flour Mills, has opened the company's elevator at Lowell, Neb.

Martin & Liggett, of Herrington, Kan., have purchased the Santa Fe Elevator at Hope, Kan.

J. H. Donis & Son are moving their elevator at Gibbon, Neb., to a more convenient location.

The Soeton & Ritchey Lumber Co. is just completing a 10,000-bushel elevator at Chappell, Neb.

The Marquette Elevator Co. has been incorporated at Marquette, Neb., with a capital stock of \$20,000.

The Lindsborg Mill and Elevator Co. have remodeled and improved their elevator at Hilton, Kan.

Work has commenced on the Shellabarger Mill & Elevator Co.'s 35,000-bushel elevator at Smolan, Kan.

Perringer & Jewett are building a 15,000-bushel elevator at the new town of Lodge Pole, in western Nebraska.

L. S. Blenkiron, of Sioux City, Iowa, has sold his elevator at Jackson, Neb., to Sounders-Westrand Co., of Omaha.

The Omaha Elevator Co.'s elevator at Monroe, Neb., has been bought by the Monroe Farmers' Association.

The Shellabarger Mill & Elevator Co. has bought the Wm. Gillman elevator and coal yards at New Cambria, Kan.

Twenty-nine country grain elevators on the Rock Island Railroad in Kansas, including a large terminal elevator at Topeka, now operated by the Home Grain Company, have been leased to the Midland



Elevator Co., which owns about forty other elevators along the U. P. Ry., in Kansas.

The Farmers' Elevator at Woodston, Kan., is being remodeled and enlarged, giving it a capacity of 25,000 bushels.

William Couerdale, who has been connected with the Milligan Grain Co., is manager of the elevator at Lakeview, Mich.

F. W. Ross and friends are reported to have secured a controlling interest in the Sterling, Kan., farmers' elevator.

The T. P. Gordon Commission Co. has been incorporated in Missouri, by T. P. Gordon, H. H. Watts and W. S. Johnson.

The King-Traux Co., of Sioux City, Iowa, is building an elevator at Rosalie, Neb. This makes the fourth elevator at this point.

The Home Grain Co. have sold their elevator at Esbon, Kan., to the Wright-Leet Grain Co. There will be no change in management.

Seven elevators on the St. J. & S. I. Ry., owned by the late J. H. Gregg, have been sold to the Shannon Grain Co., of St. Joseph, Mo. for \$27,500.

S. D. Brown, president, and D. J. Baldwin, secretary and treasurer, are the officers of the new Farmers' Elevator Co., organized at Hubbell, Neb.

The St. Louis Forage & Supply Co., St. Louis, has been incorporated with a capital stock of \$5,000, and will conduct a hay, grain and feed business.

J. J. Dowdy of Dexter, Mo., has recently installed a No. 4½ Western Combined Sheller of the latest improved type, made by the Union Iron Works, Decatur, Ill.

B. C. Ragan & Sons, Nortonville, Kan., have recently equipped their elevator with a new Western Rolling Screen Cleaner, made by the Union Iron Works, Decatur, Ill.

The Nebraska-Iowa Grain Co., of Omaha, is building a 200,000 bushel additional storage room to its elevator. The Burrell Engineering & Construction Co. has the contract.

McCoy & Vigor of Olathe, Kan., have recently installed a No. 6 Western Pitless Sheller, made by the Union Iron Works, Decatur, Ill., which is considered a great improvement in their corn handling machinery.

The Colburn Bros. Milling Co., of McPherson, Kan., has purchased the Parker line of elevators along the Santa Fe. There are five of these elevators, located at Conway, Galva, Windom, Little River and Mitchell.

The 150,000-bushel reinforced concrete elevator, built for the Shellabarger Mill & Elevator Co., of Salina, Kan., is now ready for the machinery. The elevator was built by the MacDonald Engineering Co., of Chicago, and Skillin & Richards Mfg. Co. have the order for the machinery equipment.

#### THE DAKOTAS.

Walum, N. D., is to have a new elevator.

An elevator is to be built at Hurd, N. D.

An elevator is being built at Guelph, N. D.

Frankfort, S. D., is to have a new elevator.

Another elevator is to be built at Bugord, N. D.

A farmers' elevator is planned for Nekoma, S. D.

S. M. Braun is erecting an elevator at Scotland, S. D.

Bert Kemp is building a new elevator at Renville, N. D.

Farmers are building an elevator at Brampton, N. D.

The Walters elevator at Marvin, S. D., is being enlarged.

The new elevator at Lily, S. D., is under construction.

A 30,000-bushel elevator is being erected at Newark, S. D.

The farmers of Kuroki, N. D., will build or buy an elevator.

H. C. Ostendorf is building an elevator at Ft. Pierce, S. D.

D. A. McLeod has bought an elevator at Donnybrook, N. D.

The Van Dusen Co. is putting up an elevator at Philip, S. D.

The new Powers Elevator at Berea, N. D., is nearly completed.

The Farmers' Elevator at Corson, S. D., is undergoing repairs.

A new elevator is being built at Benedict, S. D., for the farmers.

The Farmers' Co-operative Grain Co., of Britton, S. D., have purchased the St. Anthony and Da-

kota Elevator at Burch, and have taken possession.

The farmers' association has purchased an elevator at Wales, N. D.

The old elevator at Hamble, N. D., is being replaced by a new one.

A large elevator is being erected at Quinn, S. D., by the Van Dusen Co.

The Rieder Elevator at Waubay, S. D., has been sold to William Hayden.

H. J. Arnold, of Landa, N. D., has purchased an elevator at Stanley, N. D.

Farmers at Vienna, S. D., have organized and bought an old line elevator.

Will Hayden, of Waubay, S. D., has bought the Rieger Elevator at Florence.

The Western Lumber & Grain Co. is building a new elevator at Reeder, N. D.

Spotswood, the new town near Hitchcock, S. D., is to have an elevator this fall.

The contract for the St. Anthony elevator at Havanna, N. D., has been let.

E. Nelson, of Souris, N. D., has bought N. O. Hendrick's elevator at Esmond, N. D.

The Equity Society of Crosby, N. D., will buy an elevator for this season's business.

Ed. Heller, of Lodi, S. D., has purchased an elevator and coal shed at Le Mars, Iowa.

An elevator is being built on a siding four miles east of Egeland, N. D., on the Soo line.

Simon Soward has purchased an elevator at Como, S. D. He will reside at Arlington, S. D.

Farmers around Gilstrap, N. D., will organize an elevator company with a capital of \$5,000.

The directors of the farmers' elevator at Landa, N. D., have purchased an automatic scale.

The Chilson Grain Co. are rebuilding their elevator, recently burned down at Butler, S. D.

The Farmers' Elevator Co. has been organized at Blunt, S. D., with a capital stock of \$20,000.

The C. & N.-W. Ry. has ordered work on the new farmers' elevator at Iroquis, S. D., suspended.

Tom Wold has sold his elevator at Sawyer, N. D., to the Minnetonka Elevator Co., of Minneapolis.

The Van Dusen Elevator Co., of Minneapolis, Minn., are building an elevator at Quinn, S. D.

A 25,000-bushel elevator is being built at Reeves' Spur, near Jamestown, N. D., for the Star Elevator Co.

A new larger elevator is to be erected on the site of the small one now being wrecked at Hitchcock, S. D.

The Farmers' Elevator Co., of Logan, N. D., has purchased the elevator of the Minnekota Co. for \$5,000.

Mr. King of Volin, S. D., contemplates the removal of his elevator to Stafford's Crossing, five miles distant.

McCabe Bros. are wrecking their elevator at Cavalier, N. D., in order to remove it to a point near Carman, Man.

The farmers about Ryder, N. D., will build an elevator. A company has been incorporated with a capital of \$15,000.

A company has been organized at Seneca, S. D., with a capital of \$20,000, to build and operate a farmers' elevator.

The farmers' elevator at Omeme, N. D., is undergoing repairs on account of damages sustained during a recent storm.

Martin Friederich has purchased the A. A. Traux elevator at Parkston, N. D. The new firm will be M. Friederich & Co.

A farmers' elevator company has been organized at Saunders, N. D., which expects to build a house for the fall business.

The new town of Stella, S. D., is to have a farmers' elevator. A company has been organized with a capital stock of \$5,000.

The Farmers' Elevator Co., of Doland, S. D., has let the contract for a 50,000-bushel elevator to be completed by Sept. 15th.

The Western Lumber and Grain Co. is building an elevator at Haynes, N. D. L. Sattler, of Gilstrap, has been secured as buyer.

When the new elevator at Langford, S. D., is complete the elevators of that place will have a combined capacity of 225,000 bushels.

The Farmers' Elevator Co. at Bisbee, N. D., has increased its stock from \$7,000 to \$18,500, and will build another house at Agate, N. D.

A company has been organized at Crown Butte for the construction of an elevator at Sweet Brier, N. D. The capitalization is \$25,000. Frank Zander

is president, Frank Sturm, vice-president; Frederick Froelich, secretary, and Pius Zueger, treasurer.

The Farmers' Elevator Co., of Sherwood, N. D., is improving its house by fireproofing the engine room and installing additional grain-cleaning facilities.

W. H. Mensing, of Kulm, N. D., has purchased an interest in the elevator business of Hedtke & Grosz, at Ashley, N. D., and will assume the active management of the elevator.

D. McKinnon, of Madison, S. D., has purchased a flat house at Junius, from the Ostroot Elevator Co., of Lake Preston, which he will convert into an elevator by enlarging and improving it.

The Fernie Farmers' Elevator Co. has purchased the Hawkeye elevator at Stratford, S. D. The company already owned a house at that point, but it was inadequate to meet the requirements of their business.

Joseph Power, et. al., of Langdon, N. D., have secured an option on ground near the Canadian border with a view to erecting a 40,000 bushel elevator when the Canadian Pacific Railroad's branch from Windgate reaches that point.

#### CANADIAN.

The farmers near Strome, Alberta, are building an elevator.

Theo. Meyers is building an elevator at Fillmore, Sask.

W. J. McClain will build an elevator at Lethbridge, Alberta.

The Alberta Pacific Co. will enlarge its elevator at Red Deer, Alberta.

Davidson & Ford will erect an elevator at Mellville, Sask., costing \$35,000.

The Alberta Pacific Elevator Co. is enlarging its elevator at Red Deer, Alberta.

The Great West Grain & Elevator Co. are erecting an elevator at Red Deer, Alberta.

N. Burnett, of Nanton, Alberta, is erecting a grain elevator and warehouse at Vancouver.

The Saskatchewan Western Elevator Co., Ltd., will build an elevator at Tugaskie, Sask.

The McLaughlin Elevator Co. is contemplating the building of an elevator at Osage, Sask.

The Melfort Farmers' Elevator Co., Ltd., has been incorporated with office at Melfort, Sask.

The Hedley-Shaw Milling Co., Ltd., has leased the East Elevator dock at Port Colbourne, Ont.

The Norris Elevator Co. will build a 20,000-bushel elevator at Burdette, a new town in Alberta.

Four thousand dollars has been expended in overhauling the C. P. R. elevator at Prescott, Ont.

The National Elevator Co. is building four new elevators between Regina and Momerte, Alberta.

The Great Western Elevator Co., of Brandon, contemplates building nineteen elevators in Alberta.

A. E. Olson, lumber and grain dealer at Semons, has sold his lumber business to the Reliance Lumber Co.

J. C. White, of Duluth, has secured site on the water front at Eburne, B. C., on which to erect an elevator.

The Farmers' Elevator Co., Ltd., of Melita, Man., are building a 30,000-bushel elevator beside their other one.

The Imperial Elevator Co. is making an addition of 25,000 bushels capacity to the elevator at Rouleau, Sask.

The Western Milling Co. will rebuild their elevator at Calgary, Alberta, which was recently destroyed by fire.

Alex McFee & Co., Ltd., has been incorporated at Montreal, Canada, to carry on a grain business. The capital stock is \$149,000.

The capital stock of the Alameda Farmers' Elevator and Trading Co., Ltd., Alameda, Sask., has been increased to \$80,000.

The Thunder Bay Elevator Co. has let the contract for the construction of a 1,000,000-bushel elevator at Port Arthur, Ont.

Sites at Buzzard Inlet, Vancouver, for elevators have been applied for by the Alberta Pacific Elevator Co. and the Alberta Grain Co.

The Farmers' Elevator Co., Clanwilliam P. O., Man., is advertising for bids on the construction of a modern elevator at that place.

It is estimated two hundred elevators will have been erected in Saskatchewan this season, with a combined capacity of 24,139,500 bushels.

The Sunny Belt Elevator Co. is erecting elevators at Carstairs, Magrath and Crasfield, Alberta, each to have a capacity of 30,000 bushels.

A large concrete warehouse is to be erected on the east side of Fort William by the Consolidated Elevator Co., which will have a capacity of 1,700,-



900 bushels. The present elevator of the company carries 96,000 bushels.

The British American Grain Elevator Co. is erecting elevators at nine points along the Canadian Northern Railway, between Brandon and Regina.

J. W. Tackaberry of Merlin, Ontario, has recently installed in his elevator a No. 1 Western Gyrating Cleaner, made by the Union Iron Works, Decatur, Ill.

W. J. Bettinger & Co. is said to be planning elevators for Carstairs, Crassfield, Strathmore, Gleichen, High River, Cayley, Nanston, Parkland and Warner, Alberta.

The Cummings Elevator Co. will build an elevator at Langdon, Alberta. The Alberta Grain Co. and the National Elevator Co. also will erect elevators at this point.

The Conger Elevator Co. is rebuilding the house destroyed by fire at Rouleau, Sask., at a cost of \$15,000. The capacity of the new elevator will be 80,000 bushels.

The Imperial Elevator Co., Winnipeg, have purchased the High River Trading Co.'s warehouse at High River, Alberta, on which site they will build a 50,000-bushel elevator.

The Alberta Grain Co., which absorbed the Old Dominion Elevator Co., has moved its headquarters from Strathcona to Calgary. The company controls fourteen elevators.

The Peavy Elevator Co., of Minneapolis, has purchased control of the Northern Elevator Co. stock, at Winnipeg, comprising about 175 elevators in Canada; consideration \$17,000,000.

The Barnett & Record Co., of Minneapolis, have the contract to erect fifteen reinforced concrete tanks with capacity of 300,000 bushels for the Ogilvie Flour Mill Co. at Winnipeg.

Permit has been issued to G. E. Burnett, covering the erection of a 70,000-bushel elevator on the south side of False Creek, Man. The structure will be forty-eight feet square and sixty feet high, and the estimated cost \$10,000.

The construction at Victoria Harbor, on the Georgian Bay, of an elevator for the C. P. R. is announced. The capacity is to be 12,000,000 bus., making this elevator the largest in the world. Improvements are to be made on wharves and terminus.

Geo. Cook and W. Vanstone, of Regina, propose to erect a 300,000-bushel elevator at that point, and are asking the city council for a portion of the site supposed to have been sold to the New Prague Milling Co., which that company has as yet failed to utilize.

In order to facilitate the exportation of wheat from Vancouver the C. P. R. contemplates the establishment of a grain-sacking plant at that point, as well as such other facilities as may be required by the shippers of wheat to England via British Columbia.

The Export Grain Co., Ltd., with a capital of \$200,000, has been organized to carry on a general grain and milling business. The offices will be at Brandon, Man. The provisional directors are: M. and R. Gillespie, C. H. Lamontague, C. E. McKay, W. Peacock, and J. R. Brodie.

The British Empire Grain Co. has been incorporated at Winnipeg, to carry on a grain, milling and warehouse business and transport products by land and water; capitalization, \$500,000. The provisional directors are: A. P. Stuart, E. S. Jacques, G. R. Crowe, P. J. Montague, W. S. Boyd.

The Consolidated Electric Co. has contracted to duplicate its present 1,000,000-bushel elevator at Fort William, Ont., except that its construction will be reinforced concrete instead of tile. The excavation is about completed and the pile driving started. The contract was placed with James Stewart & Co., Chicago.

Black & Muirhead, Ltd., has been incorporated, with office at Ft. William, Ont., capital stock \$100,000, to deal in cereals and cereal products. The provisional directors are: A. W., E. E. and J. L. Black, W. D. and L. Muirhead. An elevator will be erected at Ft. William, which will be accessible by three railways.

The Matheson Elevator Co. has been organized at Brandon, Man., capitalization, \$100,000. The incorporators are G. S. Matheson, R. M. Matheson, J. S. Matheson, J. W. Fleming and J. McQueen, the first three of whom will constitute the board of directors. The new company will take over the eight elevators owned by T. S. Matheson, located at Midale, Caron, Guernsey, Stillson, Griffin, Keeler, Herbert and Moose.

Elevators having an initial storage capacity of 250,000 bushels, have been started by the builders at Calgary, Alberta. The construction will be of the steel tank type, each holding 50,000 bushels, so constructed that the capacity of the whole may be increased to a million bushels. The contract calls for completion within sixty days. This new elevator is being built for the Globe Elevator Co., composed of local grain men.

[For the "American Elevator and Grain Trade."]  
**ELEVATOR AND GRAIN NEWS OF OHIO.**

BY H. L. SPOHN.

A. M. Nosser, representing Knight & McDougal, of Chicago and New York, was in Toledo calling on local grain dealers, last week.

W. W. Cummings, of the Coon Grain Co., has returned after an absence of a couple of weeks on a fishing expedition to Michigan.

David Anderson, of the National Milling Co., Toledo, has been elected a director of the Produce Exchange in place of C. L. Cutter, resigned.

Warren McIntyre, who has been in charge of the Travis Elevator at Deshler for a number of years, severed his connection with the concern recently.

Julius Storrer, of Montpelier, has sold his interest in the milling business of C. Storer & Sons to the other partners and expects to engage in the poultry business at Niles, Mich.

A fierce hail storm which struck Logan County about the middle of July damaged the crop of corn and oats to the extent of thousands of dollars. Hail stones as large as walnuts fell.

Among the recent visitors at the local exchange was Paul Rousset, of Paris, France, representing A. Rousset, a Paris seed dealer. Mr. Rousset is in this country in the interest of his house.

The elevator of Friedly & Buchman, at Carrothers, O., which has been in the hands of a receiver, was bought at Sheriff's sale recently, at Tiffin, O., by T. J. Friedly. The price paid was \$4,200.

A car of new southern Ohio wheat received by the Isaac Harter Co., was of excellent quality and tested 60 pounds to the bushel or two pounds over the requirements for No. 2 Red in the Toledo market.

H. C. Dachsteiner, of West Unity, says that wheat in that neighborhood is short in acreage, the condition is excellent and little or no damage has been reported from rain. Corn and oats are also in fine shape.

The Beaver Mills & Grain Co., of Celina, with a capital of \$25,000, has been incorporated with a capital of \$25,000, by J. F. Randebaugh, Henry Leunhartz, G. P. Nash, John Rodabaugh and Fred Olenhausen.

A one-week agricultural school has been granted Putnam County to be held at Leipsic, the week commencing January 24, 1910. This school will be carried on under the supervision of the College of Agriculture, O. S. U.

G. R. Anderson has been appointed trustee for the Delta Milling Co., of Delta, O., and expects to convert the property of said company into money which after the payment of debts will be distributed among the stockholders.

The grain elevator of the Dixon Grain Co., and the hardware store of Detrick Bros., Van Wert, O., were recently destroyed by fire, the loss being estimated at \$30,000 with \$16,000 insurance. The fire was caused by an explosion in the hardware store where burglars were drilling a safe.

The night force at the Sycamore, O., Milling Co., has been resumed after being off three weeks for repairs to the mill. Mr. Robinson, of Prospect, has accepted a position there as night miller, taking the place of Mr. Koch, who is now day miller in place of Mr. Fox, who expects to leave for Monroe, Mich.

O. G. Long, a Delphos, O., miller, said recently: "Farmers are rushing their bad wheat to market as fast as possible and what good grain there is will not come out as a rule until later. The best wheat is being taken to the barns where it will be given time to sweat. Oats and corn are fair around Delphos."

The report comes in from Pickerton, Fairfield Co., that wheat is fairly good in that section this year, but the harvest has been held back on account of too much rain. Oats looks promising and while excessive rains have lowered the condition the unusually large acreage is expected to make an average crop.

Frank Bartlett and Charles Turney have purchased the elevator at Naomi, O., from the First National Bank of Wauseon, and will conduct a general grain and live stock business. Mr. Bartlett has for several years been engaged in buying grain and stock while Mr. Turney is one of the most prosperous farmers and stock buyers in this section.

Application has been made for a receivership of the Cuddeback Grain Co., of Toledo. A petition to this effect has been filed in Common Pleas court, Harry Cuddeback, principal stockholder, being the petitioner. The petition alleges that the firm has been losing money and that a receiver is necessary. The liabilities are placed at \$2,499.53. The capital stock is \$10,000.

John Wickenheiser, a grain merchant at 31 Produce Exchange, received some painful injuries, including a broken arm, recently when his auto turned turtle on a country road near Grand Rapids, O. Mr. Wickenheiser with his wife and son had been to Grand Rapids on a visit to one of his grain elevators and was returning home with the young man at the steering wheel when the accident occurred. He lost control of the machine and when an obstruction appeared in the road, the machine, which was

going very rapidly, plunged over on its side in a ditch. All three were thrown out. The young driver was uninjured but Mr. Wickenheiser is suffering with a broken arm, while Mrs. Wickenheiser is suffering from bruises and the shock.

A suit was recently filed here in Common Pleas court by Charles S. Burge against the Lake Shore Railroad Co., asking the railroad company to pay \$765.35 for 102 bags of clover seed shipped by the S. W. Flower Co. to Linden, N. Y., last December and which it is alleged were lost in transit. S. W. Flower has since died and it is his surviving partner who brings the suit.

In speaking of the grain situation here Louis Menzel, of the Isaac Harter Co., said recently: "The Ohio crop is spotted this year. East of Fostoria, where one of our mills is located, the crop is fine, some of the fields running as high as 40 bushels to the acre. To the west the condition is almost the reverse. We have had splendid wheat weighing up to 63 pounds to the bushel and then some had been so bad we could not use it."

Crumbaugh & Kuehn, one of the oldest grain and seed firms in Toledo, is to be incorporated, the papers having been recently sent to Columbus. The company will have an authorized capital stock of \$15,000. The incorporators are: Ernest Kuehn, E. N. Crumbaugh, H. R. E. Kuehn, Frank Moorman and W. R. Hadnit. Ernest Kuehn will be president of the new organization, Mr. Crumbaugh, treasurer, and Mr. Moorman, secretary.

For the first time in the history of Ohio, spring wheat has been sown and grown in a successful test in Shelby County. Dr. J. A. Throckmorton sowed a large field of wheat to the spring variety. It is a later than the winter wheat, but it shows a remarkable yield. A head of the wheat showed 102 grains as against 37 grains of the ordinary winter wheat varieties, and it is said that the spring wheat was heavier upon the ground.

The best wheat in Ohio has been found in Wood County, according to the statement of an attache of the Wooster State Experiment Station, who is traveling through the state and examining wheat for joint worm. The wheat was raised on the farm of Louis Russell, east of Bowling Green, and was estimated to yield 45 bushels to the acre. I. T. Bruner, a neighbor, recently threshed 43 bushels per acre. Marshall Dimmick, in the same community, threshed 41 bushels to the acre.

T. H. Harpster, an Elyria miller, makes the statement that "had it not been for small acreage, Lorain County would probably have a slashing big crop of wheat this year. As it is land on which wheat is growing is hardly 30 per cent of the normal. As far as the condition is concerned the crop will be satisfactory, as rain has not been heavy enough to cause damage. In Medina the acreage is up to the average and there is no reason why farmers there should not have as much wheat as ever. The crop is so short in Lorain County that many farmers will buy their own flour. Every year things are happening to show that farmers should think twice before plowing up wheat fields that do not look good. One grower in particular did not get his fields seeded until the last of November and though there was scarcely a sign of the plant before March, he will get a nice lot of grain."

A first mortgage of \$250,000 and a second mortgage for \$100,000 given by the National Milling Co., to the Security Savings Bank & Trust Co., has been filed in the recorder's office at Toledo, O. They were given to secure bond issues to provide necessary working capital. The mortgages cover all the property of the company on the east side of the river between Front St. and Paine Ave. The first mortgage bears 6 per cent and is to run ten years; the second is to run twelve years and bears 6 per cent. New officers have been elected in the company as follows: David Anderson, former vice-president, has succeeded C. L. Cutter as president of the firm and is also its general manager; W. C. Marmon, a well-known miller of Indianapolis, is vice-president; and George J. Rudd is secretary and treasurer. The election of Mr. Anderson to the presidency and general management of the company is of general interest in grain circles and it is said that the general system of affairs will be changed to conform to the policies of the new management.

The convention of the National Hay association, which was held at Cedar Point during the week of July 26, was one of the most notable events of the season at the resort and beside being a splendid business meeting was a delightful social success. The entire population of Cedar Point resolved themselves into a reception committee to welcome the hay dealers. The women, attired in straw bonnets, represented "Maud Mullers" and the men with farmer straw hats and badges were all "Judges." The attendance was very large and delegates were present from such remote points as Jacksonville, Fla., Portland, Me., Denver, Baltimore, Boston, New York and Atlanta. Upon the close of the convention Thursday, it was found that the Western delegates to the convention had won a signal victory over the Eastern delegates when by a vote of 116 to 56 it was decided to reopen and further prosecute the long pending "hay rate case" before the Interstate Commerce Commission. On motion of E. M. Wasmuth, of Roan-



oke, Ind., C. S. Bash, of Ft. Wayne, Ind., was elected a committee of one to carry on the fight in the name of the Association. President Maurice Niezer, of Ft. Wayne, was directed to notify the Washington authorities of the action taken. It was an overwhelming victory for the Western shippers and buyers over the Eastern receivers of hay or commission men. It was also a hard slap at the railroads, as success before the Commission means a precedent greatly feared. Thirty representatives of railways who were present were given seats in the guests' portion of the convention hall. Among the Toledo men present were: H. H. Driggs, Frederick Mayer, John Keller, W. W. Cummings, Ned Crumbaugh, Kenton Keilholtz, H. W. DeVore and E. H. Culver, the chief grain inspector of the Produce Exchange.

[For the "American Elevator and Grain Trade."]  
**SOME ST. LOUIS GRAIN TRADE NOTES.**

BY L. C. BREED.

What is very generally regarded as likely to prove an abortive attempt at abolishing the Exchange Weighing Bureau, is a subject of some discussion on the floor. The parties seeking to bring this about have, it is said, thus far only succeeded in obtaining the signatures of a few members, mostly produce men not interested directly or remotely in the grain trade of the city.

An effort is being made by the Merchants' Exchange to induce the Illinois Railroad & Warehouse Commission to withdraw their weighers and permit the Merchants' Exchange to supervise the weighing of grain handled by the East St. Louis elevators. This change was recommended at the Peoria convention of Illinois shippers and millers and the Exchange is awaiting the reply of the Illinois Railroad and Warehouse Commission.

The officers and some of the members have protested to the Commissioner, declaring that they were being required to pay a double license tax. The Commissioner claims this is not the case because the merchant is not required to pay a commission license and a merchant's license on the same sales, and that the only double license is the tax on the stock on hand which is a part of the merchant's license and intended to catch the commodities which have not been sold when the license is paid.

The St. Louis License Commissioner has recently made a ruling to the effect that all dealers on the Merchants' Exchange who buy and sell grain for their own account are merchants in the meaning of the city license laws and are subject to a license tax of \$1.00 for each \$1,000 of business done. This construction of the law hits St. Louis elevator men and is considered onerous by their proprietors. There is also a complication of matters, owing to the fact that some of the St. Louis elevator men maintain elevators at East St. Louis. In order to avoid a controversy on this point, some of the leading firms are removing their offices to East St. Louis, and some of the elevator men say that, as in order to live they must do more or less merchandizing, and as they cannot afford to stand the additional expense involved, they would, as an alternative prefer to go out of business.

This ruling will not affect commission sales or margin trading. It is stated that the business done which will come under the ruling probably will aggregate from \$12,000,000 to \$20,000,000 annually, while the aggregate of all the business done will likely reach about \$125,000,000. The amount of business affected by the ruling is said not to exceed about 10 per cent of the total grain business of the Exchange. About 80 per cent would be taxed under the commission merchant license tax of 20 cents per \$1,000. The aggregate amount of grain on hand in the elevators probably will exceed \$500,000 on some days in March; and since the tax is on the maximum, the merchants would be required to pay about \$5,000 on that also, making the aggregate license and tax against merchants, commission and otherwise, about \$50,000 a year. This would be considerably reduced by the maximum limit of the commission license, no one commission merchant being required to pay in excess of \$500 a year, no matter how much business he may do.

**LOWER INSURANCE RATES.**

The Buffalo Board of Fire Underwriters has voted to reduce the insurance rates on steel elevators and tanks and the final decision rests with the companies to whom the new rates have been submitted. The present rate is 60 cents for each \$100 of insurance. The new rates will make an average of about 30 cents for \$100. Detached tanks will be listed at 20 cents and elevators of the modern type will be charged 25 cents. All steel elevators will be allowed a rate of 30 cents. Malt houses will come in under the new classification. They are not on the old schedule and the new arrangement would permit the insurance of a number of the buildings along the water-front which are not now covered.

Send us the grain news of your neighborhood.

## COMMISSION

Will Parker has become associated with Wightman & Neafus, Chicago.

The Probst Grain Co. of Arkansas City, Kan., will open a grain office at Wichita, Kan.

W. S. Jackson, former president of the Chicago Board of Trade, recently returned from a short outing in Europe.

Young & Co., Chicago, announce that they have secured the services of Harry G. Smith as traveling representative.

John A. Sattler, who has been in the office of W. A. Rundell & Co., Toledo, Ohio, is now representing the company on the road.

O. C. Scott & Co., formerly of Evansville, Ind., has opened an office in Minneapolis, Minn., and will do a general grain business.

Seidel & Dalton of Minneapolis, Minn., have been succeeded by Dalton & Gould. The members of the firm are Stephen A. Dalton and James A. Gould.

Robert C. Wright and C. O. Kalman, until recently connected with the Great Western Railroad, will engage in the grain commission business in St. Paul, Minn.

Tod W. Lewis has been admitted to membership with firm of C. E. Lewis & Co., of Minneapolis, Minn. The firm is now composed of C. E. Lewis, John Feitchie and T. W. Lewis.

Fred D. Austin, recently of the firm of Crichton & Co., of Chicago, has formed a connection with E. P. Bacon & Co., of Milwaukee, and has opened a Chicago office at 434 Postal Telegraph Building.

Flowers Brothers have opened an office in Oklahoma City and will do a grain brokerage business. The firm is composed of E. G. Flowers, of Vicksburg, Miss., and U. G. Flowers, of Oklahoma City.

The membership of George B. Flock on the Kansas City Board of Trade has been posted for transfer to C. Fred Aylesworth, of the Midland Elevator Co. Mr. Flock is now engaged in the automobile business.

The Kasota Elevator Co., of Kasota, Minn., will remove its head offices to Chicago and add a general grain commission business to the present business. Branch offices will also be opened at Minneapolis and Milwaukee.

Gardiner B. Van Ness, in the Postal Telegraph Building, has increased his grain service to the public by adding to his force J. P. McKenzie, formerly manager of the grain department of the Quaker Oats Company and more recently with C. L. Dougherty & Co.

Geo. Koch and W. J. Anderson have organized the Anderson-Koch Grain Co., at Wichita, Kan. Mr. Anderson has purchased a membership in the Wichita Board of Trade from C. W. Lonsdale, of the Home Grain Co., whose offices the new company will occupy.

Harry H. Hill, recently manager of the wholesale grain, hay and feed firm of August Ferger & Co., of Cincinnati, Ohio, has engaged in business for himself. Mr. Hill is well known in the grain trade of the South, having been formerly connected with Union Hay & Grain Co., Early & Daniels Co., and Metzger, Hill & Co.

H. Hallet & Carey Co. have succeeded the firm of Hallet & Co. in the Chamber of Commerce at Minneapolis, Minn. There is no change in the membership of the firm as Frank L. Carey, whose name is added to the firm, has been a member and in charge of the cash grain department for the past year and will continue in that capacity.

Arthur Freeman, for the past three years connected with the Simonds-Shields Grain Co., and for many years a member of the Kansas City Board of Trade, has arranged to make his home permanently at San Diego, Cal. His membership on the Board has been posted for transfer to Robert Y. Smith, of B. C. Christopher & Co.

The Randall-Gee-Mitchell Company, of Duluth, Minn., which has been doing business as a partnership, has filed articles of incorporation. The officers are: William C. Mitchell, Duluth, president; Austin C. Randall, of Minneapolis, vice-president, and Henry D. Gee, of Minneapolis, secretary and treasurer. The capital stock is \$100,000.

The firm of Arnot & Co. has been established with S. P. Arnot at the head, in rooms 440-442 Postal Telegraph Building, Chicago. Mr. Arnot severed his connection with the Updike Commission Co. a few months ago and has been spending the time intervening in recuperating in the South. His health, which had been poor, has been entirely regained.

The firm of Marfield, Tearse & Noyes, at Chicago, Ill., has undergone some changes recently. W. H. Noyes has resigned his office of secretary and will spend a year abroad in an effort to regain his health. He is succeeded by Fred W. Maynard, recently with G. H. Daggett Company. Clarence D. Tearse of the Minneapolis office has gone to Inter-

national Falls, where he has taken charge of the lumber interests of the Backus-Brooks Company.

It is announced that the Bartlett interests have withdrawn from the firm of T. A. Grier & Co., of Peoria, Ill. The change is caused by the desire of W. H. Bartlett to get out of business. T. A. Grier remains at the head of the firm, which will continue business as usual.

## ARBITRATION DECISIONS.

Secy. Gibbs of the Texas Association has published the following discussion by the arbitration committee of that body:

C. L. Moss vs. Amos K. Bass and McCord & Horton.—In the above styled cause pending action of the arbitration committee of the Texas Grain Dealers' Association, we the said committee, find as follows:

We find that a contract was entered into between Amos K. Bass of Caddo, Ok., and C. L. Moss of Dallas, Texas, for sale and purchase of two cars oats at 49 cents f. o. b., destination weights and grades to govern final settlement, as set forth in a letter dated Dallas, Texas, July 17th, 1908, to Amos K. Bass from C. L. Moss.

In due course of time the two cars oats referred to were ordered to Memphis, Tenn. C. L. Moss failed to sell the oats on arrival, and bills of lading for same were turned over to Webb & Maury of Memphis, with instructions to have same stored in public warehouse, said oats to be stored in their original sacks and their identity preserved. The two cars oats were duly turned over to McCord & Horton of Memphis with the above instructions, and McCord & Horton acknowledged receipt of these instructions as per their letter dated Memphis, Tenn., August 3d, 1908, to C. L. Moss, Dallas, Texas, reading in part as follows: "Messrs. Webb & Maury of this city have turned over to us for your account cars M. K. & T. 12,203 and 71,732 No. 3 red oats, their instructions to us being that these cars be stored in their original sacks and their identity preserved."

We find a second contract was entered into between McCord & Horton and C. L. Moss, the substance of same being that the oats referred to be stored in their original sacks and their identity preserved. When the two cars oats were weighed in Memphis, Tenn., there was a shortage in weight of 9,605 lbs. as set forth by the official weights in Memphis, and a bill from C. L. Moss to Amos K. Bass for 9,605 lbs. sacks oats at 48 cents per bushel, \$144.07.

We find quite a lot of correspondence between C. L. Moss and Amos K. Bass in regard to this shortage. In this correspondence we find a third contract between Amos K. Bass and C. L. Moss, as set forth in a letter from C. L. Moss to Amos K. Bass, dated Dallas, Texas, November 18th, 1908, making a proposition that the oats be reweighed and that they settle on the reweight of the oats. This proposition is accepted in a letter from Amos K. Bass to C. L. Moss, dated Caddo, Oklahoma, November 22d, 1908, reading in part as follows: "After proper investigation, if I find the oats short, of course, I will protect you."

H. B. Dorsey of Fort Worth finally succeeded in getting Mr. Chas. F. Kolp of Memphis, Tenn., a disinterested party, to go to the warehouse of McCord & Horton and reweigh the oats. It seems from his letter that for quite a while this warehouse, together with all the public warehouses in Memphis, was in a congested condition and he was unable to reweigh the oats; but on December 1st we find a letter from Chas. F. Kolp to H. B. Dorsey, dated Memphis, Tenn., December 1st, 1908, reading in part as follows: "The elevator has been relieved somewhat of the congested condition and through the courtesy of McCord & Horton I was permitted to weigh 650 bags of the oats. Until above number of sacks were weighed I did not know that there were 100 sacks of the oats that had either been dumped or mixed with other red oats in the elevator; but, as I explained to you some time ago, all the elevators in Memphis have been in more or less congested condition and it seems that when they removed oats that were piled near Moss' oats the pile began to fall and in this manner the oats were mixed. McCord, Horton or myself did not know that the entire lot was not there or it would have been useless to have weighed a part of the sacks, as it would be impossible to make an intelligent check without weighing the entire lot."

The failure on the part of McCord & Horton of Memphis, Tenn., to fully carry out their contract to store the oats in original sacks and preserve the identity of same, prevented Mr. Kolp from reweighing the oats, thereby preventing C. L. Moss of Dallas, Texas, from collecting his claim from Amos K. Bass of Caddo, Oklahoma.

We, your committee, therefore find in favor of C. L. Moss of Dallas, Texas, for the amount of his claim, \$144.07 and order McCord & Horton to promptly pay to C. L. Moss of Dallas, Texas, \$144.07, the amount of his claim; and the secretary is instructed to return to Moss and pass their deposit fees.



## THE EXCHANGES

Minneapolis Chamber of Commerce memberships are worth \$4,000.

The St. Louis Merchants' Exchange Publicity Bureau is now in operation, under the direction of Bert Ball.

The Oklahoma City grain dealers are organizing a Board of Trade, 25 firms having taken out charter memberships.

The Baltimore Chamber of Commerce has filed objections with the carriers to the scale of switching charges enforced by the railroads in that market.

Standard Oats, as defined by the Grain Dealers' National Association Grade Rules, has been made the speculative grade by the Detroit Board of Trade.

The grain committee of the New York Produce Exchange for 1909-10 is as follows: W. H. Kemp, Ely Bernays, E. Pfarrius, H. G. Graff and L. W. Forbell.

The Kansas City Board of Trade has appointed W. J. Graham, lately with the Kansas State inspection office, chief sampler to succeed J. J. Hiddleston, resigned.

The editor desires to acknowledge the courtesy of Secy. Bigelow of the Kansas City Board of Trade, who has supplied us with the "Annual Statistical Record for 1908."

The directors of the Milwaukee Chamber of Commerce have adopted a rule requiring all members to procure grain samples through the Chamber's own inspection bureau.

Detroit has adopted the new commission rates schedule, to-wit, to non-members 1c per bushel on wheat, rye, barley and oats; to members, 75 per cent of the rates to non-members. Effective August 1.

The hay and grain committee of the Board of Trade of Jacksonville, Fla., has adopted the grading rules of the Grain Dealers' National Association. And about all the dealers of the city have agreed to abide by the board grading under these rules.

The Baltimore Chamber of Commerce has adopted a resolution endorsing the plan of creating a permanent tariff commission, "believing that the general business interests of the country will be benefited by the investigations and recommendations of such a body."

The Philadelphia Commercial Exchange has appointed a committee to confer with the Railroad Commission on the matter of demurrage. The committee will ask for 72 hours of free time for unloading flour and grain products. The shipper also desires a credit for unused free time.

The Chicago Board of Trade Mutual Benefit Association now has a membership of 887 and a value to the beneficiary of \$2,984.53. The net gain in membership since September 5, 1908, has been 188, of an average age of 33 years. The average rate per \$1,000 paid by members is \$14.08 and the rate per year for management is 74c.

The Chicago Board of Trade will entertain representatives of the grain exchanges of the West at Chicago on September 17 and 18. J. C. Murray of the Corn Products Co. has been made chairman of the committee on arrangements to work out the details of the program. It is expected that the attendance will be quite large from exchanges of the Mississippi and Missouri Valleys especially; and an elaborate program for entertaining will be provided.

Mr. George Hadrill, secretary of the Montreal Board of Trade, will attend as a delegate the Congress of Chambers of Commerce of the British Empire at Sydney, New South Wales. He will have as his colleague H. B. Ames, M. P., and they sailed together from Vancouver direct to Sydney on August 13. A very important question that will be discussed at the Congress will be the strengthening of the bonds of the British Empire by a mutually beneficial commercial policy.

Pres. E. E. Scharff has published notice warning members of the St. Louis Merchants' that Sec. 12, Rule IV, regulating commission rates to members of the St. Louis Merchants' Exchange that the rate is 1/16c to members, except where a customer executes a trade himself. It is also announced that, "To avoid any misunderstanding the board will not hold as a violation a charge of \$2.56 on each 5,000 bus. where a member executes one end of the trade and the commission merchant the other."

### WICHITA BOARD OF TRADE.

At the annual appointment of officers of the Wichita Board of Trade, on July 14, J. S. Macaulay was appointed secretary and E. K. Neoling, treasurer, to succeed themselves. F. C. Dymock and J. W. Craig were elected directors to succeed D. Heenan and H. Imboden.

The plan of taking charge of the weighing of

grain at Wichita elevators and mills, or the superintending of that weighing, is now under consideration by the Board.

### COMMISSION RATES.

A recent conference of representatives of the grain exchanges of the West, held at St. Louis, adopted a new schedule of commission rates for handling various products, as follows: The commission rate to non-members will be 1c a bushel on wheat, rye and barley, and 1/2c on corn and oats. The commission rates to members will be 75 per cent of the above.

Before the schedule can become effective it must be adopted by the chambers of commerce or other grain exchanges in the various cities.

### SAMPLING AT MILWAUKEE.

A sampling bureau in connection with the Inspection Department of the Chamber of Commerce has been established, and samples are furnished to those firms who request them at 15c per car. The Department is arranging for the use of private seals to be attached to the car immediately after sample has been taken, and to be removed when car reaches its place of delivery.

The department has also inaugurated the system of inspecting grain at the office instead of in the yards. Samples are taken by the official samplers and sent to the office where the grade is put on them by the inspectors.

### NEW BOARD OF TRADE BUILDING.

The members of the Chicago Board of Trade on July 13 voted on the proposition to erect a new building on the site of the present building at Jackson boulevard and La Salle street at a cost of \$4,000,000. The majority of the 1,700 members voted in favor of the proposition.

The committee appointed by President John A. Bunnell to put the matter into form for final action is composed of Frank M. Bunch, John C. Wood, C. F. Schneider, James Bradley, Ben B. Bryan, J. C. F. Merrill, Allan M. Clement, Edward Andrew, Charles H. Sullivan, E. L. Glaser, George M. Reynolds, William S. Jackson, A. Stamford White, Reuben G. Chandler and James Pettit.

### FIRST RICE AT NEW ORLEANS.

The New Orleans Board of Trade rice committee on July 13 adopted the following resolution which was submitted to a vote of the membership of the exchange:

"In view of the abuses growing out of the rushing of so-called first rice to this market; that the exhibition of samples, presumably typical of early rice, and such practices tend to mislead and do absolutely no good except get a little cheap notoriety for the parties interested, and, further, as they are capable of doing much harm,

"Resolved, That whenever such parcels or package of rice are received by any number of this Board of Trade, the same be not exposed or offered for sale on the Board of Trade until the matter be submitted to the rice committee, three members of which shall constitute a quorum to decide in the matter, the right of appeal to the board of directors being granted should the committee's decision be questioned."

### CALGARY GRAIN EXCHANGE.

The organization of the Calgary Grain Exchange has created some discussion among grain growers and buyers at that important market because of the devious methods employed. In the first place, says the Calgary News, a provincial charter for the Calgary Exchange, Limited, was procured by L. P. Strong of the Alberta Pacific Elevator Co., John McFarland of the Alberta Elevator Co., A. R. Campbell of the Pacific Elevator Co., and three legal gentlemen. Soon after the same persons procured a charter from the Dominion government for the Calgary Grain Exchange, which was followed by the announcement that the Calgary Grain Exchange had purchased and absorbed all the rights and privileges of the Calgary Grain Exchange, Ltd., having paid therefor \$30,000, of which \$29,000 is quoted as "stock."

The newer exchange is capitalized at \$100,000, divided into 1,000 shares of \$100 each, the possession of five of which is necessary to entitle the holder to membership. The newer corporation has arranged to keep the majority of the shares and sell the rest, which will give its shareholders full control of the situation for all time to come.

"The situation means," says the Calgary Daily News, "that the old company started with nothing but a charter from the provincial government and that it is holding up the other grain men for \$27,500, which is the amount of the stock the company wishes to sell, before the others can share any of the privileges. The charter would not likely cost more than \$600. The incorporation for nothing at all secured itself \$29,400 in stock. The prospectus of the corporation states that 180 grain men have applied for membership, but the grain men declare that they will demand their checks back now that

they know the ins and outs of the concern. A meeting of the independent grain men has been called with a view to taking some steps to protect their own interests."

### NASHVILLE GRAIN EXCHANGE.

A meeting of the Nashville Grain Exchange was held on July 13 to consider the situation created by the decision of the Commerce Commission on the matter of allowances and rebilling, ordered discontinued at that market on and after September 1. The meeting was an executive one, and nothing has been given out concerning the proceedings authoritatively. It is understood, however, that an injunction will be applied for to prevent the order from becoming operative.

As an alternative defense it is proposed to pay more attention to the commerce in grain possible via the Cumberland River.

"We have been looking over the situation for some months," said an official of the Central Grain and Elevator Company recently, "and preparing to get a lower rate on grain. We have contracted for fifteen big barges to be delivered in December and ten more to be delivered in March. With these barges we will be enabled to get grain into Nashville via the river, and I believe we can cut the rate in half; in fact, I've told the railroads that."

### COMMISSION RATES AT PHILADELPHIA.

The Philadelphia Commercial Exchange at a special meeting held on July 19 adopted the following schedule of minimum rates of commission as a matter of protection against rate-cutting. It was voted to fine every broker \$100 for each offense in buying or selling at a lower commission than the one prescribed. Hitherto there had been no standard commission rate recognized by brokers, the commission being made at the discretion of the broker. The new schedule of rates for receiving, selling and accounting follows:

Wheat, 1 cent per bushel; corn—for export, 1/2 cent per bushel; domestic, 1 cent per bushel; oats—for export, 1/2 cent; domestic, 3/4 cent per bushel; rye, 1 cent per bushel; barley—for export, 1/2 cent per bushel; domestic, 1 cent per bushel; ear corn, 1 1/2 cents per bushel; bran, shorts, chops, mixed or mill feed, 50 cents per ton in carload lots; clover, timothy and other feeds, 2 per cent.

In addition to the rates agreed upon it was decided that the legal rate of interest must be charged on all advances. The agreement also says: "No rebate, drawback, brokerage or allowance shall be made, directly or indirectly, through any other party or parties. Nothing in this agreement shall be construed as preventing a higher rate being charged by special agreement."

### ROW AMONG MEMBERS AT WINNIPEG.

A factional fight is on among members of the Winnipeg Grain Exchange, the commission men on one side and the elevator interests on the other. The immediate result is that wheat is being sold on the floor without charge, the elevator men, by what the commission men call a "snap" role, having suspended for this crop year the commission rule of 1 cent a bushel for selling grain. Should this action stand, the elevator men will, of course, drive the regular commission men out of business.

The explanation for this apparently remarkable procedure is given by President Hugh N. Baird of the Exchange as follows:

"Some time ago a committee was appointed to go over the by-laws of the Grain Exchange and report on any changes which were deemed advisable. On Monday afternoon the Exchange met to consider the report of this committee. There was a full attendance and as the report was lengthy and many points of discussion raised, the meeting was adjourned until Tuesday afternoon, when there was a long and very full discussion of the commission rule. After a number of amendments had been put and lost a motion was put and carried by a very large majority to suspend the commission rule from now until the 15th of July, 1910. This motion to suspend was, as I have said, carried by a large majority, and the meeting at which it was passed was a large and representative one.

"This suspension is merely to test the effect on the trade of the absence of the commission rule, and should it be found to work badly, or to be injurious to the business of the Exchange, it can and will be revoked and the rule re-instated at any time during the year. That is the whole story. It was not announced, because it was considered merely the private business of the Exchange.

"There are various causes assigned for the suspension of this rule as pointed out by Mr. Baird. One of them is that the Grain Growers' Grain Co., an offshoot of the Grain Growers' Association, is handling a very large proportion of the crop and is antagonistic to the Exchange," says a correspondent of the *Commercial West*. "By abolishing the commission rule any commission man being a member of the Exchange may handle the wheat at whatever price he likes and thereby cut into their business. The Grain Growers' Grain Co. is, in the opinion of some of the grain men, designed to defeat the pur-



poses of the Grain Exchange, and the personnel of its members is responsible for all the inconvenience and the expense which the members of the extinct Grain Exchange were put to.

"Another explanation is that the elevator men have not made any money during the last few years. They have very large amounts of capital invested and the returns upon it during the last few years have been ridiculously small. Their business has suffered as a result of the selling of the wheat in car lots and to the agitation which has been maintained by the Grain Growers' Association."

#### NEW COMMISSION RATES IN TOLEDO.

The Toledo Produce Exchange has changed the rules relating to commissions to read as follows:

"The commission for buying and selling wheat in car lots shall be not less than one cent per bushel. The commission on corn, oats, rye and barley shall be not less than one-half cent per bushel. In cargo lots of not less than 20,000 bushels, commission shall be not less than one-quarter cent per bushel. Grain delivered on contract and resold here is subject to commission of one-quarter cent per bushel, and when grain is delivered and shipped out, commission shall be one-half cent per bushel; on grain bought in for sellers' account to fill uncompleted sales for stated shipment and delivery, commission shall be one cent per bushel for wheat and one-half cent per bushel for other grain. For future delivery, commission shall not be less than one-eighth cent per bushel, excepting for members of other exchanges when the charge is one-sixteenth. Where trades are made in other markets the commission charged shall not be less than charged in such markets.

"Commissions for buying and selling clover and alsike seed shall be one per cent, with a minimum charge of fifty cents. For futures of clover and alsike one-half per cent shall be the commission. The commission on timothy and other seeds not mentioned above shall be one and one-half per cent for car lots, and two per cent for less than car lots, with a minimum charge of fifty cents.

"It is understood and agreed that the selling price shall be the basis for commissions on trade for future delivery. Penalty for violation of above is expulsion."

#### EXCHANGE MEMBERSHIP CHANGES.

**Chicago.**—Sec'y Geo. F. Stone reports the following changes in the membership of the Chicago Board of Trade taking place in July, 1909. New members—Warner E. Morris, Frank N. Thayer, Edward E. B. Adams, Thos. A. Grier, Lee W. Partridge, Washington Fleyner, Sherman Saunders, Edward T. Campbell, Samuel I. Karger, Bernard G. Brennan; withdrawals—J. H. Bowman, Est. N. A. Duff, W. D. Hutton, N. W. Bartlett, Jesse W. Young, L. E. Howard, C. C. Rubins, Stephen L. Ruffy, D. W. Cook, E. A. Rang, G. D. Rumbold.

**Cincinnati.**—Superintendent C. B. Murray reports that William Callan has been admitted to membership in the Cincinnati Chamber of Commerce by transfer of the certificate of A. H. McLeod, deceased.

**Detroit.**—Sec'y F. W. Warring reports that the firm of Day-Kaumier Grain Co. withdrew from business on the Detroit Board of Trade on June 30.

**Indianapolis.**—Sec'y Jacob W. Smith of the Indianapolis Board of Trade reports the admission to membership in that body in July of C. A. Great-house, president of the Files Grain Company, 622 Board of Trade Building; and J. H. Buning, merchandise broker, 30 So. Pennsylvania street. There were no withdrawals; but the Board lost a member by the death of Franklin L. Spahr.

**Milwaukee.**—Sec'y H. A. Plumb of the Milwaukee Chamber of Commerce reports the following admissions to membership in that body during July: J. H. Sprecher, P. E. Weiss, F. J. Thatcher, C. G. Børgart, O. K. Richards, B. W. Frank, O. S. Nichols, A. J. M. Riebs, Thos. C. Brown, J. E. De Wolf, R. V. McNellis. The following certificates were transferred: C. J. Kershaw, Geo. K. Gibson, K. A. Tallmadge, V. J. Larkin, C. G. Brady, and those of the following deceased members: F. L. Vance, Wm. Baer, J. H. Van Dyke, H. Nunnemacher, C. G. Stark, Warren Gee.

**New Orleans.**—Sec'y H. S. Herring reports the following persons elected to membership in the New Orleans Board of Trade in July: Harry Bros. Co., of Louisiana; B. Meyer, president Louisiana Molasses Co.; E. G. Schlieder, president American Brewing Co.; H. Bentz, president New Orleans Brewing Co.; Missouri Pacific Ry. Co., W. H. Reed, general agent; Louisiana Railway & Navigation Co., H. W. Bechtell, general agent; Julius Wyler, president Consumers Brewing Co.; Chas. Karst, president Columbia Brewing Co.; J. L. Beer & Co.; Gulf Ref'g. Co. of La., represented by J. L. James; Mr. W. C. Faust, proprietor New Orleans Transfer Co.; N. O. & G. N. R. R., represented by G. B. Auburtin, A. G. F. A.; F. Salmen, Salmen Brick & Lumber Co.; Muller Furniture Mfg. Co.; W. R. Stauffer, Stauffer-Eshleman Co.; The Texas Co. of Louisiana, represented by L. A. Jung.

**Peoria.**—Sec'y Lofgren reports that H. B. Jamison, general insurance, became a member of the Peoria Board of Trade in July.

**San Francisco.**—Sec'y T. C. Friedlander reports the following changes in the membership of the San Francisco Merchants' Exchange during the month of July: J. H. Rinder to succeed Fung Fow; Wm. T. Lemman to succeed Geo. W. Lamb; Andrew J. Gove to succeed J. D. Gove; Irving M. Wilson to succeed Wm. Wilson; James Tyson to succeed Charles Nelson.

**St. Louis.**—Sec'y Geo. H. Morgan reports the following new members of the St. Louis Merchants' Exchange interested in the grain trade: Douglas Halliday of the Halliday Milling Co., Cairo, Ill.; C. M. Lawless of the Moore-Lawless Grain Co., Kansas City, Mo.; Eugene B. Purtelle, Chicago, and Henry Roberts, Takama, Nebr.

**Toledo.**—Sec'y A. Gassaway reports the following new members of the Toledo Produce Exchange elected in July: Geo. J. Rudd, treasurer of the National Milling Co., and Wm. E. Cratz, of Cratz Bros., seeds.

#### RICHMOND GRAIN TRADE.

The new directory of the Grain Exchange of Richmond, Va., met on July 13 and organized. Pres. John R. Cary presided.

The several officers of the Exchange presented their annual reports, showing the Exchange to be in a good condition. The secretary submitted the forty-second annual report, which is as follows:

Number of members on roll, 61. Receipts for the year—wheat, 1,691,772 bushels; corn, 1,586,818 bushels; oats, 1,701,624 bushels; rye, 51,260 bushels; total, 5,031,474 bushels. Flour, 210,639 barrels; hay, 28,436 tons; millfeed, 11,762 tons.

In addition to the above large quantities of meal, peas and grass seed are sold, for which no record is kept. Inspections for the year were: Grain, 237 cars, and hay, 149 cars.

Capt. B. A. Jacob was re-elected secretary for the twenty-eighth term; Rodolph King was re-elected chief grain and hay inspector; H. D. Riddick, deputy grain inspector, and S. R. Gates, deputy hay inspector.

The following are the standing committees for the year, the first named on each being chairman:

Executive—T. L. Moore, N. R. Savage, Edward Alvey, W. C. Bentley and S. T. Beveridge.

Arbitration—J. D. McIntire, W. C. Bentley, George D. Mayo, John S. Lear and R. L. Chenery.

Appeal—J. E. Cox, B. Lorraine, William Temple, J. Lee Koiner and W. F. Wood.

Trade—W. F. Richardson, Jr., J. F. Jacob, W. T. Selden, F. P. Cooke and T. L. Moore.

Grain—S. T. Beveridge, W. R. Johnston, J. E. Cox, A. L. Carter and R. L. Chenery.

Hay—C. W. Wingfield, I. L. Sutherland, W. R. Todd, E. B. McGeorge and J. J. Fairbank.

Quotations—Edward Alvey, John F. Jacob, W. G. Bragg, H. G. Carter and C. W. Wingfield.

New Members—J. E. Cox, T. L. Moore, John F. Jacob, W. F. Richardson, Jr., and George T. King.

#### WEIGHING BUREAU AT CINCINNATI.

On August 4 the board of directors of the Cincinnati Chamber of Commerce concluded a two-days' session during which they had under consideration new weighing rules and the virtual reorganization of the Weighing Bureau as to its conduct. The adoption of the new rules by the board is considered one of the most important actions of that body in many years.

Rules 1 and 2 provide for a chief weigher, supervisors and deputy weighers to be appointed by the board of directors, and the chief weigher shall act under the direct orders and instruction of the board. Rule 3 relates to salaries which are fixed by the board, and employees may receive for their services no other compensation whatever. The other rules are as follows:

Rule 4—The Chief Weigher shall have control and direction of all Supervisors and Deputy Weighers. He shall see that all scales are kept in proper working order, and have the same periodically inspected and tested by approved methods. A record of all such inspections must be kept, showing date, test used, variations, notes, etc. Use of scales found out of condition or giving incorrect results to be suspended pending repairs or adjustment. He shall make such reports to the board of directors as may be required. He shall have authority to suspend or remove for cause any Supervisor or Deputy Weigher. Whenever it is found necessary to exercise this authority he shall submit a written statement to the board of directors, giving the reasons for so doing. He shall appoint, subject to regular confirmation and approval by the board of directors, such Supervisors and Deputy Weighers as emergencies may require. He shall collect all fees for weighing due the Chamber of Commerce under these rules and pay the same into the treasury thereof.

Rule 5—The Supervisors shall inspect the operations, methods and records of all Deputy Weighers. They shall have authority to weigh at any point within the jurisdiction of the Chamber of Commerce and reweigh at any point where a Deputy Weigher is stationed, and shall make such reports to the Chief Weigher as required.

Rule 6—Deputy Weighers may be appointed upon the request of the proprietors of elevators, mills and warehouses under these rules, provided Weighers are in no way interested in the ownership of the

property they shall weigh. The Chief Weigher may dispense with the services of any such weighers upon the request or complaint of the proprietors of elevators, mills or warehouses. Owners of public wagon scales, who are members of the Chamber of Commerce, and employees designated by them, may be appointed Deputy Weighers by the board of directors. Each weigher shall keep a correct record of all his weighing operations, and furnish the bureau with a copy of same, personally see that all of the contents of each and every car are correctly weighed, and shall issue weight certificates showing such weight.

If a car is found to be in bad order in such a way as might contribute to loss or damage, the weigher must immediately notify the local freight agent of the railroad on whose tracks the car is then located of such defect, and the local freight agent of the railroad shall, as soon thereafter as possible, send an inspector to examine the car jointly with the weigher. If they agree upon the facts, notations as to the specific defects shall be made upon the weight certificate and signed jointly by the weigher and inspector. If they are unable to agree, each will make written report of his findings and conclusions in duplicate, each furnishing the other with a copy, these reports to be filed with the Chief Weigher, who shall determine as to the notations to be made on the certificate.

Rule 7—All sales, purchases and consignments of car lots of grain, hay, feed, etc., for delivery within the switching limits of Cincinnati, made by members of the Chamber of Commerce shall be on basis of the Chamber of Commerce weights, any deviation to be with the consent of the Chief Weigher or any three members of the standing Weighing Committee.

Rule 8—All elevators, mills and warehouses operating under these rules shall sign an agreement binding themselves to abide by the regulations thereof. Any railroad company accepting the conditions of and operating under these rules shall be furnished promptly with Chamber of Commerce weight certificates, and shall at all times have full access to the record and files of the Weighing Bureau.

Rule 9—Official certificates of weight shall be issued by weighers acting under the Chamber of Commerce, such certificates to be of such form as authorized by the board of directors. Official certificates must show the entire contents of each car unloaded, designating the number of bales or sacks, if so loaded, and must show the initial and car number from which the property was unloaded. For grain, hay or feed, certificates shall report also the condition of the car, with such other details as the nature of the case calls for. Original and duplicate certificates shall be furnished to the party ordering the weighing, and if the weighing is not by order of the seller he shall be entitled to receive a copy of the certificate. Certificate of weights shall be consecutively numbered and shall bear the seal of the Chief Weigher of the Cincinnati Chamber of Commerce.

Rule 10—The fees for weighing at warehouses, mills and elevators having regular weighers shall be 50c per car on grain and grain products, and \$1 per car on hay and straw. The fees at public scales shall be \$1 per car on grain, grain products, hay and straw. The fees at warehouses, mills and elevators having no regular deputy weighers shall be \$1 per car on grain, grain products, hay and straw, plus the actual cost to the Chamber of Commerce for services of the Supervisor.

Rule 11—All warehouses, mills and elevators operating under these rules shall pay to the Chamber of Commerce 15c per car on all grain and grain products, and 25c per car on all hay and straw weighed, inbound. On business outbound between industries within the switching limits where certificates are issued, a charge of 15c per car shall be made.

The railroad companies operating under these rules shall pay to the Chamber of Commerce 15c per car on all inbound and outbound weights for which certificates must be furnished, except on business between industries within the switching limits of Cincinnati.

Owners of public wagon scales shall not be required to pay any fee to the Chamber of Commerce on property weighed over such scales.

All controversies arising between members on matters relating to weighing shall be submitted to the Standing Weighing Committee for decision.

The present Chief Weigher is William McCallister, who, it is understood, will continue in that position. The new rules make it necessary to appoint Supervisors, positions not existing under the old system. There will be three or four of these, as found necessary, their duty being to detect violations of the rules. The number of deputy weighers probably will be increased as each elevator, mill or warehouse is entitled to a weigher on application.

A voyage of 120 days usually suffices by sailer to get wheat from Puget Sound to Europe, but of last year's fleet several are reported 150 to 180 days out, voyages in "marked contrast to that of the American ship Manga Reva, which recently arrived at Delaware breakwater, 102 days out from San Francisco."

Secretary McCotter of the Grain Dealers' National Mutual Fire Insurance Company, has tabulated the company's losses for the past six years. These cover 194 fires of which 42.7 per cent were total, 32.5 per cent partial and on 24.8 per cent no claim was made. Of the elevators insured, 45.4 per cent used steam boilers and 46.68 gasoline power. The principal causes of fires were lightning with 22.2 per cent; locomotive sparks, 21.2; outside exposures, 9.9; hot boxes, 6.8; and power houses, 5.1.



## HAY AND STRAW

De Pere, Wis., reports a fine crop of hay.

Hazleton, Kan., contemplates putting up an alfalfa mill.

Delphos, Kan., will probably build an alfalfa mill this season.

Visalia, Cal., is considered as a point for an alfalfa mill.

A \$10,000 alfalfa mill is being constructed at Mulyane, Kan.

The hay crop at Neillsville, Wis., is very satisfactory this year.

An alfalfa mill is being planned for Gypsum, Kan., to cost \$10,000.

Reports from Idaho indicate a large crop of hay of good quality.

Antwerp, N. Y., reports a light hay crop on account of drought.

The Grange Milling Co., Modesto, Cal., is building a \$150,000 alfalfa mill.

The Puritan Milling Co., of Manhattan, Kan., is erecting an alfalfa mill.

There is a movement on foot to erect an alfalfa mill at McPherson, Kan.

Marshalltown, Iowa, this year has one of the biggest hay crops in years.

Heavy rains near Anaconda, Mont., July 26-27, damaged hay that was cut.

Contract has been let for the construction of an alfalfa mill at Cadams, Neb.

A bumper crop of hay on increased acreage is reported from western Montana.

A heavy crop of hay has been cut under favorable conditions at Monticello, Minn.

The first national alfalfa show will be held at Wichita, Kan., September 20-25.

The drought at Sackets Harbor, N. Y., threatens to cause a shortage of the hay crop.

A. P. Hughes, of Plano, Tex., contemplates starting an alfalfa mill at Frederick, Okla.

The citizens of Twin Falls, Idaho, are contemplating erecting an alfalfa mill at that place.

A field of wheat hay near Colfax, Wash., is reported to have yielded seven tons to the acre.

The U. S. Alfalfa Products Co. has been organized at Huron, S. D., with a capital of \$350,000.

The hay crop about Bethpage, Tenn., has sustained considerable damage from excessive rains.

The Judith Basin, near Lewiston, Idaho, will have enormous crops of alfalfa and timothy this year.

Blackwell, Okla., is agitating the alfalfa mill question, and may decide to build a mill this year.

The ninth annual meeting of the Michigan Hay Association was held at Lansing on Aug. 4th and 5th.

The hay crop in Quebec is reported short. Owing to scarcity, hay sold recently in Toronto at \$20 per ton.

The annual meeting of the New York Hay Dealers' Association was held at Syracuse on Aug. 9th and 10th.

St. Louis' first car of new timothy hay arrived at that market on July 7. It was sold at auction for \$15 per ton.

Despite an abundance of rain, Rutland, Vt., will probably have less than two-thirds of the usual crop of hay.

Chicago capitalists have built an alfalfa mill at Concordia, Kan., representing an investment of about \$10,000.

Exports of hay from Montreal during the first week in August were 7,394 bales as against 1,704 bales a year ago.

M. C. Peters & Co., of Omaha, will build an alfalfa meal mill near Gothenberg, Neb. This firm has a capitalization of \$1,000,000.

Alfalfa meal is late in getting on the market in Kansas City this year, on account of the general rains. Conditions are favorable for second crop.

The Henrietta Milling Co., Henrietta, Wash., expects to handle 5,000 tons of alfalfa during the coming year, running two shifts of twenty-two men.

The Imperial Valley Alfalfa Meal Milling Co., recently formed at El Centro, Cal., with a capitalization of \$50,000, is erecting a three-story building.

The oat meal mill at Seward, Neb., is being transformed into an alfalfa mill. The name of the new concern is the Seward Cereal and Alfalfa Milling Co.; capitalization, \$25,000; capacity, two tons per hour.

The average estimate of the hay crop might perhaps be correctly placed as follows: Wisconsin about 1½ tons to the acre, Illinois 1¾ tons per acre, Nebraska and Iowa slightly less, Nebraska and Kansas 1½ tons to the acre, Ohio and Michigan 1¾ tons to the acre and Missouri a trifle less. Of

course certain other estimates are greatly at variance with these.

Prospects of an increased business have caused the Sunnyside Alfalfa Milling Co., of Sunnyside, Wash., to build an addition to its mill, 32x80 feet, before opening up for the new crop.

The hay crop on the Island of Montreal and vicinity is a fairly good one. The crop on the north and south side of the St. Lawrence and along the Richelieu river is also reported favorably. Ontario's crop is slightly below the average.

The hay crop around Huron, S. D., is excellent.

The Consolidated Alfalfa Milling Co., of Kansas City, Kan., contemplates building twenty-five mills in Kansas this year. The capital stock of the company is \$250,000. It is trying to place \$10,000 worth of stock at Cawker City, and erect a mill at that point.

The embargo against the landing of hay and straw in Great Britain from Pennsylvania, New Jersey, New York, Maryland and Delaware was removed by the British Board of Agriculture on July 31. It is understood that the British board would now have no objection to the withdrawal of any restrictions which may have been imposed upon the exportation of hay and straw from Michigan also.

### HINTS AS TO NEW HAY.

While old hay will have the preference for some time yet, we feel the importance of keeping before the shipper the fact that new hay lightly baled is much safer and sells more readily, says the Pittsburg Grain and Hay Reporter. Bales size 17x22 should run 80 to 100 pounds; 16x18, 70 to 80 pounds. Hay should be loaded on ends in car. These precautions should be taken until all danger of heating is past.

### HAY EXCHANGE WAR AT ST. PAUL.

The rival hay exchanges at St. Paul are fighting for existence, the attack of the St. Paul Board of Trade on the eleven seceding firms taking the form of an order refusing to allow them to weigh on the St. Paul Board of Trade's scales at the foot of Prince Street, near the freight yards, so that they are forced to haul their consignments to Seventh and John Street, where they have rented a scale for their exclusive use.

Since the secession the old board (St. Paul Board of Trade) has admitted the following as members: H. H. Roller, Dore & Redpath, S. Cummings, C. C. Emerson, J. Stiegler & Company, Hosie & Company, P. Presley & Company, R. A. Dykes and the Crescent Creamery Company. The seceders, the St. Paul Hay and Grain Board of Trade, have their office in the Gilfillan Block. The members meet every noon and make their quotations, which are ignored, of course, by the members of the St. Paul Board of Trade.

### HIGH MARKET PRICES.

The following table shows the highest prices, also prices for No. 3 timothy hay, in the markets for the week ended Aug. 6, as reported by the *Hay Trade Journal*:

|                           | Choice. | No. 3.  |
|---------------------------|---------|---------|
| Boston .....              | \$21.00 | \$14.50 |
| New York .....            | 21.00   | 16.00   |
| Jersey City .....         | 21.00   | 16.00   |
| Brooklyn .....            | 21.00   | 17.00   |
| Philadelphia .....        | 19.00   | 14.50   |
| Pittsburg .....           | 16.50   | 11.25   |
| Pittsburg prairie .....   | 9.00    | .....   |
| Buffalo .....             | 17.50   | 13.00   |
| Baltimore .....           | 18.00   | 15.50   |
| New Orleans .....         | 18.00   | 13.50   |
| New Orleans prairie ..... | 8.50    | .....   |
| Richmond .....            | 17.00   | .....   |
| Newport News .....        | 16.50   | .....   |
| Kansas City .....         | 11.00   | 7.00    |
| Kansas City prairie ..... | 7.75    | .....   |
| Minneapolis .....         | 11.00   | 8.25    |
| Minneapolis prairie ..... | 10.00   | .....   |
| St. Paul .....            | 11.00   | 8.25    |
| St. Paul prairie .....    | 10.00   | .....   |
| Chicago .....             | 16.00   | 12.00   |
| Chicago prairie .....     | 12.00   | .....   |
| Cincinnati .....          | 17.50   | 14.00   |
| Louisville .....          | 16.50   | 13.00   |
| St. Louis .....           | 17.50   | 11.00   |
| St. Louis prairie .....   | 11.00   | .....   |
| Cleveland .....           | 16.00   | .....   |

### HAY TRADE IN PITTSBURG.

We have advised in many of our issues the past year that the demand for hay was below normal and the Pittsburg market was not in position to take care of the usual amount. Our annual statement shows the past year's receipts were 1,700 cars below the average of former years. There were two causes which brought about this condition. The most important we considered to be the fact that in the surrounding counties there was an unusually large crop of hay last year, which supplied many consumers and dealers in the towns surrounding Pittsburg their entire wants for the season. This, together with the industrial conditions, which were very unfavorable, had the effect of cutting off our usual demand. Then too, the capacity of cars was much greater.

There has been a marked improvement in every line in our industries and reports indicate that this fall will find everything booming. We also find

that the very opposite is true of the hay crop in this section, which will be one of the lightest in many years. There is practically no clean timothy in this section. The dry weather last fall having had a very serious effect. What hay we have is reported to be about 25 per cent weeds. There is one feature of this market, however, for which we think the Reporter deserves great credit. During the entire season the supply and demand has been very well regulated. We have not had the frequent glut experience of former years which were very unpleasant to receiver and often losing shipper considerable money.—Hay and Grain Reporter.

### MICHIGAN HAY ASSOCIATION.

The annual convention of the Michigan Hay Association was held at Lansing on August 4 and 5, about 150 members of trade being present.

The first session was distinguished by an address on the relation of the Agricultural College to the hay trade by Prof. R. S. Shaw, of the College.

The report of G. C. Warren, chairman of the committee on the late hay quarantine and embargo was also interesting and valuable. The report detailed the work done by the committee at Washington. "By acting as an association," said the report, "we were able to make our influence felt much more strongly than the members could individually. Our committee made a strong showing as to the great injury the quarantine was doing the business interests of the state and as a result the embargo was raised promptly, except in four counties where the foot and mouth disease originated."

The second day's session was an executive one, attended by members only. A new constitution was adopted, and the following officers were elected: W. I. Biles, of Saginaw, president; F. E. Leighton, of Jackson, vice-president; E. C. Forest, of Saginaw, secretary-treasurer.

The hay crop was estimated by those present at 80 per cent of the normal as to quantity, but extra fine in quality. Members reported, however, that Eastern buyers considered present prices to be too high for a free movement of hay.

### THE NATIONAL HAY CONVENTION.

The annual convention of the National Hay Association held at "The Breakers," Cedar Point, O., on July 27-29, was perhaps the largest in point of attendance and one of the most important in some respects ever held by that influential body. About 400 members, with many ladies, were in attendance; and in spite of the many outside attractions, the sessions were well attended and the business carefully transacted.

There were many interesting addresses (one by Gov. Harmon's secretary, Geo. S. Long); but the main topic of the convention was the "Hay Rate Case" and its final disposition, over which there was a sharp debate.

This is a very old matter, originating in the removal of hay from the 6th class and its insertion in the 5th class by the Traffic Association, entailing an additional charge of about \$1 per ton on practically all the hay shipped in the United States. The Association filed a complaint with the Commerce Commission which ordered the railroads in interest to reduce the classification to the 6th class; but the order was ignored by the carriers, which appealed the case to the U. S. District Court at Cleveland, their point of law being that the Commission had no legal authority to make and enforce such an order; and the court sustained this contention of the carriers. The Hay Association then appealed to the U. S. Supreme Court, which failed to reach an agreement, six judges only sitting in the case and the court being equally divided on the question at issue.

When the Hepburn act came into force, giving the Commerce Commission power to make its orders effective, the Hay Association gave the board of directors authority to deal with the case, which body at this meeting reported that in their opinion the best interests of the hay trade would be served by letting the matter drop; and they therefore asked authority of the Association to request the Commerce Commission to dismiss the case.

This request precipitated the debate, which was long, heated and earnest, those opposed to dismissing the idea, from the West particularly, demanding that the Association adopt a formal resolution to that effect.

Finally, after a debate lasting over four hours, a resolution was adopted reopening the case and placing the authority and responsibility for prosecuting it with Chas. S. Bash, of Fort Wayne, Ind. He has already retained James Manahan, of Minneapolis, as counsel.

The following officers were elected: W. H. Robinson, Green Springs, O., president; Smith L. Young, Lansing, Mich., first vice-president; Cyrus H. Bates, Boston, second vice-president; J. V. Taylor, Winchester, Ind., secretary-treasurer, and C. H. Springer, Moravia, N. Y., J. W. Beatty, Philadelphia; George S. Loftus, St. Paul; Maurice Niezer, Fort Wayne, Ind., and C. E. Nicholas, Lowell, Ind., directors. The hold-over directors are: C. J. Austin, New York;



A. E. Noyes, Jackson, Mich.; C. S. Carscallen, Jersey City; H. R. Hall, Sandoval, Ill., and W. S. Leavitt, Boston.

The convention closed with a banquet.

#### WHY HAY IS GRADED LOW.

The following circular has just been issued by the Department of Agriculture, summarizing a Farmers' Bulletin (No. 362) entitled "Conditions Affecting the Value of Market Hay":

"The rules of the National Hay Association recognize twenty-three grades of hay, which seem to fall into five classes: Timothy, clover, mixed timothy and clover, wild grasses, and alfalfa. Choice timothy hay must be sound, properly cured, of bright natural color, not mixed with more than one twentieth of other grasses, and well baled. Lower grades of timothy are Nos. 1, 2 and 3, and "no grade." Clover hay has two grades, No. 1 and No. 2. No. 1 clover must be medium clover, sound, properly cured, not mixed with more than one twentieth of other grasses, and well baled. Choice alfalfa hay must be reasonably fine leafy alfalfa of bright green color, properly cured, sound, sweet and well baled. Other grades of alfalfa are Nos. 1, 2 and 3, and "no grade." These rules are used by most cities that have official inspection.

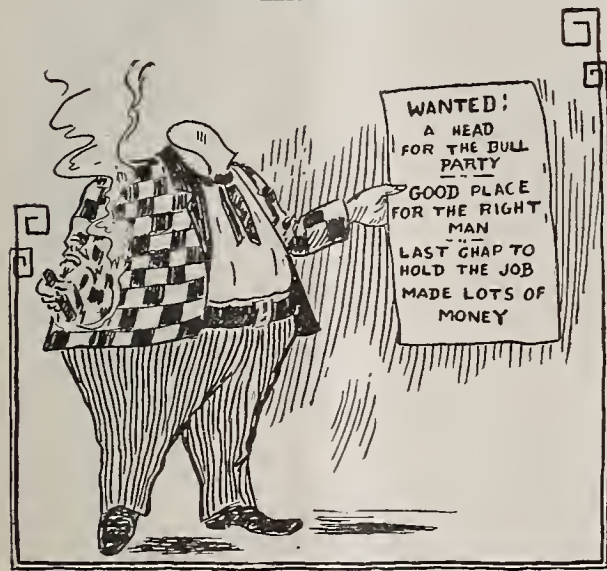
"A large percentage of the timothy on the market is graded below No. 1. The reasons are that many meadows are cut for years, until they become weedy and mixed with other grasses, and that the hay is often cut too late, so that it loses the bright natural color and palatability. If the farmer would send to market nothing but what the feeder considers good he would get a higher price. It might be necessary in some cases to educate the country buyer also.

"Timothy has the lead, especially among city feeders, because it is not only nutritious but palatable and nonlaxative, and the horse is not likely to overfeed. Nevertheless, other kinds of hay would often prove better for the feeder. Alfalfa, for instance, has high muscle-building qualities and is especially valuable for draft horses. It is highly relished, however, and the horse may overfeed. Doubtless the feeder will in time learn that hay from legumes has great value when properly used.

"Meantime the farmer is obliged to include clover and other legumes in his rotation in order to maintain the fertility of his land. In regard to good rotations the U. S. Department of Agriculture is glad to give advice.

"In any case, the farmer who sells hay should seek to produce the highest grade by keeping his meadows pure and by proper methods of cutting, curing and stacking."

#### THE WHEAT CAMPAIGN.



No head to it. (There are rumors, however that the Armour Co. is itching for the place).—Zahm & Co., July 31.



Bulls are anxious for a king or, rather, a leader. Will they find one, or won't they need it?—Zahm & Co., August 7.

## FIRES-CASUALTIES

Lightning damaged the elevator at Violet, Neb., July 12.

The Alberta Grain Co.'s elevator at Leduc, has been destroyed by fire.

The Abilene, Kan., Mills' elevator was wrecked by a high wind on July 12th.

The H. L. Harnly Elevator at Logan, Iowa, burned out July 30; loss \$3,000.

Powers Elevator Co.'s elevator at Dawson, N. D., was slightly damaged by lightning on Aug. 7.

The Farmers' Elevator at Church's Ferry, N. D., was slightly damaged by lightning in July.

Kelly Bros' Elevator at Lambert, Okla., has been destroyed by fire. The plant was insured.

The Northwestern Elevator, at Neilville, Minn., was burned on July 16. It will be rebuilt.

The farmers' elevator at Alice, N. D., was struck by lightning on Sunday, July 11, and slightly damaged.

The farmers' elevator at Garden City, Iowa, was considerably damaged by lightning in the early part of July.

The John Campbell Milling Co.'s elevator at Port Stanley, Ont., was damaged by fire July 1, to the extent of \$500.

The hay and grain elevator of C. P. Dodd, Louisville, Ky., was destroyed by fire on Aug. 8. The insurance is \$9,000.

The elevator at Irving, Mich., was destroyed by fire July 2d. Sparks from a railway engine are supposed to have started the fire.

Fire damaged slightly the Northern Elevator Co.'s elevator at Arcola, Sask. Five thousand bushels of wheat were destroyed by water.

Arnold's 30,000-bushel elevator at Shoal Lake, Manitoba, together with a carload of grain, was totally destroyed on July 29 by fire.

The grain elevator of the Dixon Grain Co., Dixon, Ohio, has been destroyed by fire, causing a loss of about \$20,000, partly covered by insurance.

Eugene Brooner, of the Farmers' Elevator, Mason City, Ill., is confined to the house by injuries of the back, sustained while at work in the elevator.

The Niblick & Co. elevator at Decatur, Ill., burned down on July 24. The loss on building and contents is estimated at \$8,000, with \$3,000 insurance.

Fire again destroyed the elevator at Dixon, Ill., on July 13. The origin of the fire is unknown. A mutual company carried the insurance on the elevator.

The Ingless & Co.'s grain elevator at Cambridge, Iowa, burned on Aug. 5. The loss is \$15,000, half of which is covered by insurance. The origin of the fire is unknown.

S. D. Coon, of Goodland, Kan., was seriously injured while repairing the elevator at Rulertown. An overhead shafting and gear fell on him and fractured several ribs.

The elevator at Charter Grove, Ill., owned by Holcomb Bros., of Sycamore, burned down on July 16. The fire is said to have started on the roof from a spark from a locomotive.

The Union Warehouse and Elevator Co.'s warehouse at Bay City, Tex., was destroyed by hurricane on July 23. Only the floor remained after the storm had passed by.

The 95,000-bushel elevator of The Swisher-Lang Grain Co., at Marshalltown, Iowa, was totally destroyed by fire, Aug. 7, entailing a loss of \$10,000, on which there was \$7,000 insurance.

W. J. Dale, superintendent of the Fairport Warehouse & Elevator Co., Ainesville, Ohio, suffered injuries in a runaway on Aug. 4. He was thrown from his buggy and landed on his shoulder.

Lightning demolished the cupola of the Missoula Mercantile Co.'s elevator at Kalispel, Mont., and set fire to some grain bins. The flames were controlled after considerable damage had been done.

W. F. Brooks, employed by the Omaha Elevator Co., to do repairs on the elevator at Brainard, Neb., fell with a lantern to the bottom of a grain pit. The lantern exploded, causing Brooks to be severely burned.

The Northwestern Elevator at Norcross, Minn., burned to the ground July 10. The cause of the fire is not definitely known, but it is suspected that tramps started it. About 7,000 bushels of grain were in the building.

The Dibble Elevator Co.'s warehouse at Tenth street and Second avenue, S. E., Minneapolis, sustained damages by fire on July 26. Effective work by the fire department checked the progress of the flames. The damage is estimated at about \$10,000.

Fire totally destroyed the new alfalfa mill recently built at Alfalfa, Cal., a new station between Red Bluff and Tehama, on July 24. The building was erected at a cost of \$20,000. The loss includes 150 tons of hay and fifty tons of alfalfa meal. The

property was partially insured. Spontaneous ignition in the canvas dust chamber is given as the probable cause of the fire.

The old Englewood Elevator at Sixty-third street, Chicago, burned down July 16. The fire was spectacular, and threatened the explosion of the gas tank of the People's Gas Light and Coke Co., less than half a block away. The loss is estimated at \$20,000.

The excavation for the Stanard-Tilton Milling Co.'s four grain tanks to be erected at Alton, Ill., caused the collapse of the Starr & Struif building and the Yeakel building, adjoining. Several men and a team of horses narrowly escaped being caught by the falling masonry.

The elevator at Hollis, Kan., belonging to the Duff Grain Co., of Nebraska City, Neb., burned down July 20, 1909. This elevator was wrecked by a tornado in May. Spontaneous combustion in coal bin caused the fire. The building was covered by insurance but there was none on the grain.

The Kansas Grain Co.'s elevator at Kinsley, Kan., burned down July 20. The cause of the fire has not been discovered. The building, worth about \$3,000, was totally destroyed. About 3,000 bushels of grain were in the house when it burned. Building and contents were insured, but not to their full value. The loss is estimated at \$3,000.

Fire destroyed the Faltoner Elevator, at Logan, Iowa, on July 25, including some corn and oats contained in the building. The fire originated in an icehouse close by, from an unknown source. W. L. Harney, of Dallas, S. D., who recently foreclosed a mortgage on the property, is reported to have lost considerable by the fire. Loss estimated at \$2,000 to \$3,000.

#### OBITUARY.

Robert A. Scarbett, a prominent grain merchant of Toronto, Canada, and a member of the Board of Trade, died on Aug. 2, after a few weeks' illness.

A resolution in eulogy of the late A. T. Patterson, for forty-five years a director of the Montreal Grain Elevating Co., was adopted at a recent meeting of the directors of that company.

Benjamin R. Powell, for many years a noted lumber and grain dealer at Ottawa, Ill., died at the home of his son, Orville P. Powell, in Chicago, on July 25. He was born in La Salle County in 1837.

Fred P. Hines, of the firm of F. W. Hines & Son, Ellsworth, Wis., committed suicide by hanging himself to a tree near his father's farm in El Paso Township on July 26. Nervous breakdown is given as the cause of his act. He was 30 years of age.

James Wilson, of Danville, Ill., who last winter sold his interest in the grain brokerage business to his partner, committed suicide by drinking a quantity of carbolic acid on Thursday evening, July 8. At the time his wife was at Allerton with relatives. The cause of the suicide was poor health.

Azariah Eddy, for forty-four years a member of the Chicago Board of Trade, died on August 8 at his residence in Evanston, Ill., at the age of 75 years. For two years he had been an invalid from heart trouble. He is survived by Mrs. Eddy and two sons, Thomas Hooker and George Simpson Eddy.

John Hause, sixty-eight years of age, a grain dealer of Clinton, Mich., was instantly killed on July 26, when an automobile in which he was traveling to Ipsilanti, was struck by an express car on the D. Y., A. A. & J. division of the D. U. Ry. Mr. Hause was a member of the firm of Richmond & Hause.

Carl W. Salen, of Neill & Salen, Warren, Ohio, dealers in hay, grain and straw, was called to Cleveland on July 24 to help search for the body of his brother-in-law, Wm. P. Neill, who disappeared from the SS. *City of Cleveland* as she left Cleveland for Detroit on Friday evening, July 23. The body was found in the Cuyahoga River. It is believed that he fell into the water accidentally.

Henry Rang, a pioneer grain broker and commission merchant, died on Aug. 4, at his home, 1928 Wellington street, Chicago, at the age of 80. He was born in Strasburg, Germany, coming to America in 1852, and settling at Arlington Heights, Ill., where he conducted a grocery. In 1860 he started a commission business on West Randolph street. For nearly fifty years he was a member of the Chicago Board of Trade. Mr. Rang is survived by a widow and three sons.

George H. Dean, for many years engaged in the lay, grain and flour business, died at his home in Boston on July 18, after a long illness. Mr. Dean was born at Weatherfield, Vt., in 1840. He entered the employ of Eleazer Porter in Boston, in 1871, and two years later purchased the business of his employer. He was for a time a successful teacher, and a veteran of the Civil War, as well as a noted checker player, being president of the Boston Checker Club at the time of his death.

Indianapolis received the first car of new oats on July 22 from Illinois. It graded No. 4, being stained and damp.



## TRANSPORTATION

The Rock Island-Frisco lines into New Orleans will not be opened until September 1.

The N. P. has refused to interchange business in Washington with the C., M. & P. S. Ry. Co.

The C., M. & P. S. R. R. will make no switching charges on deliveries of grain at Tacoma and Seattle.

The Wiggins Ferry at St. Louis has reduced switching charges to \$1 per car between all connections and industries on their tracks; effective now in Missouri; interstate, on September 1.

Northwestern railroads have issued orders forbidding loaning any of their cars to foreign lines, are calling in all of the cars from other lines and generally overhauling all of their old stock.

There seems to be a difference of opinion in Kansas as to the service being rendered shippers. Sec'y Smiley says he has clear evidence of a car shortage, while the railroad men declare there are abundant cars on the sidings for all grain now offered.

The G. T. P. Ry. of Canada is now ready to handle grain between Edmonton and Winnipeg, with over 100 elevators now standing on its lines, with an average capacity of 30,000 bushels. In addition there are numerous platforms, and 5,000 cars are available.

Discussing the matter of exporting Alberta wheat via Vancouver, the railroad men declared to the Vancouver Board of Trade that the business was impracticable without terminal elevators and that the C. P. Ry. has given no indication that it would erect the elevators necessary at Vancouver.

Freight rates at and east of Buffalo have been so increased by the interested railroads that wheat from Chicago can be laid down at Baltimore, all fall, for export as cheap as by lake and rail to New York. The all-rail rate from Chicago to New York on wheat is just a trifle lower than the lake and rail, or 6.60c, against 6.75c a bu.

At a conference between railroad officials and millers and producers at New Orleans, a report was made on July 28 to the Railroad Commission that an agreement had been reached whereby the maximum rate on native grown corn from Louisiana points should be 12½ cents over one line, 15 cents over two lines, and 18 cents over three lines, and the Commission is asked to approve the schedule.

Effective August 10 the Missouri Pacific, Burlington, Union Pacific and North-Western Railroads are authorized by the Nebraska State Railway Commission to apply the wheat rate on all flour shipments in the state and the corn rates on all other shipments of mill stuff. This order is supplementary to a recent order allowing the roads to raise the rates on flour to a parity with the wheat rate between about 10 per cent of the mill stations in the state and Omaha.

At a meeting of the Uniform Ocean Bill of Lading Association, held at New York on July 20, the association completed its organization for the furtherance of its plans and the increasing of the membership during the summer. Communications have been received from various steamship interests stating their interest and willingness to cooperate in the general aim of the association. Members were appointed to represent the organization at the various financial and industrial conventions, to be held in the next few months.

It is announced that tariffs are to be made effective about October 1 which will equalize the grain rates from all points in Iowa, North and South Dakota, Minnesota and Nebraska to the Southeast, so that the grain may be moved at equal rates through all gateways. New grain rates applying south of the Ohio River from Cincinnati and Louisville will also be established at the same time. These will be flat rates, 2 cents per 100 pounds less than through other Ohio River crossings, the difference being made to compensate for a 2-cent shrinkage allowance, so that all gateways will be on a parity, whether the grain is shipped from Chicago or St. Louis.

Announcement is made that the state railroad commission of Washington will hand down its decision on August 25 on the petition filed by W. R. Cunningham and several hundred grain growers in eastern Washington several years ago to compel the Northern Pacific Railway Co. to reduce its rates on wheat from Adams County to Puget Sound. Hearings were held at Ritzville last year and further evidence was taken at Olympia on August 2, when O. O. Calderhead, rate expert for the Commission, gave figures from data he had compiled, showing that if the wheat rates are too high, as petitioners complain, rates on nearly every other commodity are likewise excessive. The railroads submitted testimony as to the market value of wheat at the Coast during the last two years. The Commission put in its findings as to the value of railroad property. The only additional evidence to be taken will be secured at St. Paul from the gen-

eral officers of the company. Chairman Fairchild of the Commission and Assistant Attorney W. V. Tanner will take testimony there the third week in August and on their return the findings will be prepared. Before the Commission can decide in favor of the petitioners it must determine that the railroads are earning more revenue than they are entitled to and then if any order of reduction is made respecting wheat similar orders must be entered covering practically every class of freight handled within the state.

### I. C. C. DECISIONS.

The Commerce Commission (No. 1827, P. P. Williams Co. v. V. S. & P. Ry. et al.), considering a complaint attacking the rate adjustment from Mississippi River crossings and Texas common points and asking for lower rates from Vicksburg to certain points in northern Texas, finds that it appears that Vicksburg has the same rates to Texas common points as New Orleans and somewhat lower rates than Memphis, which city intervenes and asks still lower rates for itself; Held: First. That to grant any part of the contentions of complainant or interveners would be to disrupt the grouping of Texas common points, or to rearrange the whole fabric of rates from the Mississippi River; second, that differentials diminish with increasing distance and vanish when the mileage on which they are based becomes inconsiderable in proportion to the total mileage from basing point to destination; and third, that the evidence was not sufficient either in character or in amount to justify the order prayed for. Complaint dismissed.

The Interstate Commerce Commission on July 23 dismissed the complaint of F. M. Turnbull Co. of New York against the Erie Railroad Co. in the matter of track storage charges. Commissioner Clements, speaking for the Commission, says in part: "This proceeding is brought by F. M. Turnbull Co., a corporation engaged in the wholesale grain business in the city of New York. Complainant ships grain from points in the West directly to the defendant's yards at Twenty-eighth Street, Manhattan Borough, and in this proceeding contends that the track storage charges of the defendant applicable to hay, established by the Commission in the case of New York Hay Exchange Association vs. Pennsylvania Railroad Co., are unjust and unreasonable when applied to the shipment of oats. Charges not higher than those applicable to hay were required to be kept in force until January 1, 1909; but the defendant has maintained them since that time, both as to hay and oats."

### GRAIN SMUTS.

A dangerous parasite of many of the cereal plants is the fungus that produces in the grain or head what is known as smut. There are several well-known kinds of smut, each of which is caused by a distinct species of the fungus.

The greatest loss from smuts in this country is from the stinking smut of wheat and the loose smut of oats. A considerable loss is also due to the loose smuts of barley and wheat, which are more difficult to control and prevent. They are widely distributed, and though they occur usually in small quantities the damage in the aggregate is large. They often are entirely unnoticed on account of their earliness and the absence of any conspicuous sign of them at harvest time.

The stinking smut of wheat transforms only the kernels into smut balls which do not break until the wheat is thrashed and often remain intact in the thrashed grain. The loose smuts of barley, on the other hand, early discharge their spores, which are blown off by the wind as soon as the smutted head comes out of the leaf sheath; they infect the plant in the flowering stage and enter the embryo inside the ovary before the latter ripens into seed. An infected seed develops a smutted plant the following year.

The most successful method thus far found for preventing these smuts is a hot-water treatment of the seed. This treatment is described in Bureau of Plant Industry Bulletin 152, entitled "The Loose Smuts of Barley and Wheat," recently issued by the U. S. Department of Agriculture. The bulletin is a report of recent researches into the life histories of these smuts and the determination of methods for their prevention, and is intended for seed growers and scientific farmers.

The Canadian Northwest promises a large crop of barley.

The "hospitals" at Chicago turned out considerable contract corn for July delivery while country dealers were busy with new wheat and oats.

The first car of new rye at Chicago came in from Illinois Friday, July 23. It graded No. 3 and sold at 75c. The first car a year ago was received at Chicago on July 16.

## The CO-OPERATIVES

The Farmers' Elevator Co. at Glenwood, Minn., lost \$12 on last crop year's business.

The Farmers' Grain and Fuel Co., Wabasso, Minn., has paid its debts and has \$41.40 undivided profits—after several years' work.

The Farmers' Elevator Co. at Rock Rapids, Ia., closed its second year with a loss of \$1,500. The company will, however, try it another year.

The Farmers' Elevator Co., Blue Springs, Nebr., has finally paid off its debt and is ready to buy at par the stock held by others than grain growers.

The Farmers' Elevator Co. of Geneva, Nebr. is settling up its business in order to quit, having been unable to buy the elevator they leased of I. N. Trask, who proposes to operate it himself hereafter.

The third annual meeting of the Grain Growers' Grain Company was held at Winnipeg on July 13. The reports showed that 7,500,000 bus. of wheat were handled of crop of 1908, on which a gross profit in excess of \$50,000 had been made.

Earnings in lump sums: Fr. El. Co., Emden Valley, Maine, \$300; Lowry Fr. El. Co., Lowry, Minn., \$700; Hutchinson Co-op. El. Co., Hutchinson, Minn., \$1,503.55; Madison Fr. El. Co., Madison, S. D., \$4,000 to distribute—8% on stock, 7 on coal and flour purchases, 2c a bushel on grain.

It appears from the reports of the various farmers' elevators in Lyon County, Iowa, says the Des Moines Capital, that they did not enjoy a very prosperous season, as nearly all of them report a deficit. The one at Rock Rapids shows a loss of about \$1,500, while the ones at Doon and Lester are about in the same condition. The elevator at George claims to have made some money.

A wind-up of the affairs of the late lamented Farmers' Co-operative Grain and Live Stock Association of Kensett was reached recently, and all stockholders who had paid their collateral notes received a check for 33 cents on the dollar of their stock. And the Kensett News says the officers and late stockholders "are one and all rejoicing now that the matter is finally settled." In the language of the street, "there are others," several of them right here in Northwood, who have had similar cause for hilarity. Getting out of some concerns at 33 cents on the dollar, after years of waiting, may be regarded as a streak of good luck.—Northwood (Ia.) Index.

Dividends paid on 1908 crop business: By Co-operative Elevator Co., Windom, Minn., 10 per cent; Farmers' Elevator Co., Fairmont, Minn., 10 per cent; Columbia Farmers' Elevator Co., Columbia, S. D., 20 per cent; Farmers' Elevator Co., Pukwana, S. D., 25 per cent; Farmers Co-operative Grain Co., Athol, Kan., 18 per cent; Farmers' Elevator at Wanamingo, Minn., 10 per cent; Hendrum (Minn.) Elevator Co., 30 per cent; Farmers' Grain Elevator Co., Devils Lake, S. D., 6 per cent; Farmers' Grain and Supply Co., St. Paul, Nebr., 12 per cent; Farmers' Elevator Ass'n, Glidden, Ia., 22 per cent; Farmers' Elevator Co., Kirkhaven, Minn., 10 per cent; Farmers' Elevator Co., Milan, Minn., 10 per cent; Farmers' Elevator Co., Langford, N. D., 8 per cent; Farmers' Elevator Co., Northwood, N. D., 25 per cent; Farmers' Elevator Co., Buffalo, N. D., 25 per cent.

### MORE CANADIAN ENTHUSIASM.

A Toronto telegram to a Montreal daily paper of says that, "John Kennedy of Winnipeg, vice-president of the Grain Growers' Association, which has 8,000 members in Manitoba, Alberta and Saskatchewan, is here to present a report to the Home Bank, which is giving his organization financial backing. He says petitions regarding better elevator facilities, intended for the local legislatures of Manitoba, Saskatchewan and Alberta and for the Dominion Government, are being circulated and widely signed. They ask that an independent commission be appointed to place a value upon the fifteen hundred elevators now in private hands in the west, and upon the terminal elevators at Port Arthur and Fort William. These plants the Association will offer to buy out at the valuation placed upon them by the commission and place in charge of their own men."

### FARMERS' ELEVATORS ASSOCIATION MEETING.

The semi-annual convention of the Farmers' Grain Dealers' Association of Minnesota was held at Glenwood.

The general sentiment of those present was against the contracting of grain from the farmers for future delivery unless forced to do so by competitors. The storing of grain for stockholders was considered all right if done on a business basis and at regular storage rates.

A protective clause in the constitution of a co-operative elevator company was characterized as the life of such companies, inducing more loyalty on the part of the stockholders to their elevator. Distribution of profits to stockholders in proportion



to amount of grain marketed by each through the elevator was advocated as another means to increase their loyalty, and stockholders must be made to realize that the elevator is their business.

#### SOCIETY OF EQUITY IN NEBRASKA.

At a meeting of the Society of Equity at Hastings, Neb., a meeting called for the purpose of fixing a pool or pledge, price against which the 1909 crop of winter wheat would be held, the following resolutions were adopted:

"Resolved, That it is our aim to get a profitable price by arbitrarily fixing a price upon our products, but to devise such ways and means as will enable us to get an equitable distribution between producers and consumers of the enormous profit now made by speculators and gamblers and other middlemen, and we brand as a lie any report that may be made that we have set any price on the 1909 winter wheat crop and contend that the A. S. of E. cannot rightfully be blamed for the present high prices of wheat and flour.

Delegates were present from sixty-five local branches, also a number of non-accredited visitors. It was understood that a pool price may be fixed at a subsequent meeting.

#### N. D. FARMERS IN MEETING.

At the A. S. E. meeting at Fargo, N. D., \$6,950 was subscribed in \$50 shares toward a fund to erect a 'terminal elevator.

The following resolution also was adopted:

"Whereas, It is a demonstrated fact that independent farm elevators are unable to do anything for their shareholders and patrons towards price making by following the system now in practice of selling the grain to various commission firms at terminal markets, thus placing the local elevator companies at the mercy of the grain speculators; and,

"Whereas, By co-operating among independent farm elevator companies in selling their grain through one agency at the terminals it will be possible to build up an independent marketing machine; and,

"Whereas, In this way the local elevators will retain control of the grain until it reaches the millers without being manipulated by the gamblers on the board of trade; now, therefore, be it

"Resolved, That all solicitors and organizers be instructed to interview the directors of independent elevators, in the Dakotas and Minnesota, and get them to take stock in our terminal elevator and promise their shipments of grain to our terminal agency, and as many as can be induced to become members of the American Society of Equity; and be it further

"Resolved, That the secretary of District Union No. 1, be instructed to correspond with officers of farm elevator and independent elevator companies in the three states with this object in view, and if possible arrange for a meeting to form co-operative plans between their companies."

Gov. Burke of North Dakota, at the same meeting delivered himself of some remarks on grain gambling, which may be itemized about as follows:

"The only power great enough to grapple with this evil is the Congress of the United States.

"Congress must amend the constitution, giving it greater power to control, regulate and penalize this gambling before it will be wiped out.

"I am not one who believes that there is not enough genius in American statesmanship to solve this great problem by legislation.

"Another thing. If you would stop gambling on the board of trade, you must stop the practice yourselves."

#### FARMERS' GRAIN AND SUPPLY CO.

The Farmers' Grain and Supply Company went into the hands of H. T. Ahrens as receiver at Spokane on July 14; bond, \$10,000. The application for the receiver was made by J. V. Rea, who is suing to recover on a note for \$5,200 made by the company in favor of the Farmers' and Mechanics' Bank, of which \$3,290 of principal and \$277.40 interest is due. The complaint says the liabilities are \$89,000 and that the assets are appraised at \$89,074, but that they are not worth that much. It is also alleged that there is a suit for \$19,981, brought by B. C. Moseby, receiver of the Spokane & Columbia River Railroad & Navigation Company, pending against the grain and supply company.

In his complaint Rea alleges that the Grain Company is in imminent danger of insolvency; that at a meeting of the stockholders on May 8, 1909, it was decided that it would be impossible to continue business, and that the board of trustees was instructed to try to sell the property and liquidate the indebtedness. The Company, represented by W. J. Sutton, president, and N. W. Munger, secretary, denies the allegations.

The Farmers' Grain and Supply Company has a warehouse at each of the following places: Coules City, Davenport, Wilbur, Govan, Hartline, Hites, Irby, Hatton, Washtuena, Sprague and Spangle. The stockholders are mostly farmers, 1,500 being interested. For several months the stockholders

have foreseen that the company must go out of existence, and it is said that some time ago the trustees agreed to turn over the assets for the debts.

Later Mr. Ahrens filed his report, recommending that the warehouse at Cheney be sold for \$2,250 and that at Reardan for \$5,000. He has cash in hand, \$1,992.49, and notes due the concern aggregate \$16,430.62, of which he estimates he may be able to realize \$6,000, less the cost of collection. The accounts receivable aggregate \$730.06, of which \$500 can be collected. The stock of goods on hand, consisting of sacks, grain and all personal property, amounts to \$4,756.80. There are seventeen warehouses in Washington and one at Rathdrum, Idaho. Ten of the houses are not occupied; five have been rented until June or July of next year; the Cheney and Reardan houses are under contract of sale, made before the receiver was appointed.

#### FARMERS' EDUCATIONAL AND CO-OPERATIVE UNION.

Although the Farmers' Grain and Supply Co. of Washington, a comparatively old co-operative company, operating a dozen warehouses in the "Inland Empire," has gone into the hands of a receiver, other similar experiments are being made in the same section of country, chief of which is that of the Washington and Idaho branch of a Texas concern known as the National Farmers' Educational and Co-operative Union, said to represent 10,000 growers of wheat in Washington and Idaho, which has opened a selling office at Tacoma, with C. W. Nelson in charge. The Union claims to own 80 warehouses in Washington and three in Idaho, operated by a "secret protective organization."

Besides selling grain, the Tacoma agency buys lumber and other supplies for the members.

#### FARMERS' UNION IN WASHINGTON.

The Farmers' Union of Waitsburg, Wash., has completed seven warehouses and one is under construction and is now prepared to compete with the big grain buyers for storage of the grain crop tributary to that city. The warehouse at Alto will have a capacity of 80,000 bushels, while the capacity of the eight houses is not far from 500,000 bushels, which means that the independent company will handle almost half of the Waitsburg crop. It is planned to cover all grain offered on a storage rate of 60 cents a ton until the first of the year, as against 90 cents charged by the warehouse companies. Farmers of other towns in southeastern Washington are establishing houses. Warehouses have been completed in the vicinity of Waitsburg as follows: Two at Alto, one at Monoken, two at Waitsburg, one at Coopei and two at Huntsville. Pullman Union Warehouse Company at Pullman, Wash., which recently leased five warehouses from the Kerr-Gifford Company, announces a rate of 50 cents a ton for handling grain, as against 90 cents by the so-called "warehouse combine." Men of experience say that grain can be handled profitably at 50 cents. At Fallons, twelve miles north of Pullman, is what is believed to be the only one of the old Farmers' Alliance warehouses doing business in the Palouse country. This is known as the Farmers' Alliance Warehouse, and is owned by farmers in that neighborhood. It is claimed that the lowest dividend ever paid by the warehouse was 16 per cent, and the highest 63 per cent, and that it has paid a dividend every year for sixteen years. When the Farmers' Alliance was a strong organization, eighteen to twenty-one years ago, it built and operated many grain warehouses in the Inland Empire, but when the organization was converted into the People's Party and dabbled in politics, the warehouse business was lost in the scuffle for offices and in the general breaking up of the Alliance most of the warehouses were obtained by the big companies.

Ontario's first wheat of 1909 was marketed at Toronto on July 21 at \$1. It came from Norfolk County.

The State Penitentiary of Washington up to July 24 had sold 2,500,000 grain bags for this season's crop. The daily output of the Walla Walla shop is 7,000 bags.

New Orleans grain men claim that new corn is being offered them for shipment the first week in September by Louisiana shippers, and one concern there claims to have already bought 50,000 bu. of Louisiana corn at 50c per bu. to arrive in September.

The Oklahoma Corporation Board, after default of the roads interested to appear in objection thereto, "finds that there is such a physical connection and relation between the railroads operated by the Rock Island and Frisco companies in the state of Oklahoma that it is proper and expedient that a one-line freight rate should apply on all commodities on all rates established by the Commission. It is, therefore, ordered that in the computation and assessment of freight rates on commodities upon which the Commission has heretofore fixed rates, or upon which it may hereafter fix rates, the lines of the Frisco and Rock Island shall be considered as one line." The order became effective on July 8.

## BARLEY and MALT

A heavy crop of barley is reported from Eagan, S. D.

Indications in the Northwest point to a considerable amount of light barley.

The first barley shipment of the season to Portland, consisting of 3,800 sacks, brought \$1.25 a hundred pounds.

Buffalo's first car of new barley arrived about August 1 from Ohio. It was damp, stained and mixed with wheat.

Barley in the vicinity of Winona, Minn., will be poor this season, though weather conditions appear to have been favorable.

Reports from Rochester, Minn., Flandreau, S. D., and Lidgerwood, N. D., indicate a barley crop at these points slightly below the average.

The first carload of barley to reach Minneapolis this season arrived on July 30, from Northfield, Minn. The quality was fair, but the grain was in poor condition, owing to sweat.

Barley in the San Joaquin Valley, Calif., is said this year to exceed any average yield per acre now on record; but the grain is so high at present (\$1.40 to \$1.45 per cental) that dealers are buying with extreme reluctance and in small lots only.

The foreign oats crop is said to be below an average, which will make a good call for barley this year from this side. There will also probably be little incentive to mark barley-oats mixtures this year, as was the case last year.—Tribune.

Phenomenal barley yields are reported from the western part of the state of Washington, one farmer having 115 bushels to an acre of white winter barley on 120 acres. For this barley the grower was offered \$23 a ton. This would average about \$66 an acre.

The Imperial Valley, Cal., has been sending big shipments of barley, of which the valley has a remarkable crop this year, to the Northwest. Early in June the first shipment, consisting of 300 tons, went forward from Calexico, San Diego County, to Portland, Ore., from there to be distributed to help meet the shortage of that section this year. The shipment was sent by rail to Los Angeles and thence by boat to Portland.

In view of the action of the Minnesota Board of Grain Appeals, in making a new rule to allow dockages for dirt in oats and barley, the malsters and brewers of Milwaukee on August 6 adopted resolutions in effect that unless the Wisconsin Grain Inspection Board makes the same changes they will send resident buyers to Minneapolis and do their business there. This is the first effect of a move that the Minnesota Board of Appeals had under advisement for five years, upon which it acted at the late annual meeting.

#### THE THRASHING OF BARLEY.

Complaints are frequent from maltsters and receivers of barley that injury is often done to the grain by the thrashing process, owing to the fact that the cylinder is badly adjusted, resulting in broken and cracked corns. These greatly reduce the value of the barley for malting purposes, as the broken, bruised or skinned grains fail to germinate and soon show signs of mould, thus leading to unsoundness in the malt and bad results in the brewery. The injury complained of is not limited to grains which are actually broken; grains closely nipped at one or both ends, or such as have been bruised and peeled, are equally objectionable. In fact, if by too vigorous threshing the husk of the barley is damaged, although the damage may not be apparent, irregularities in the malting, accompanied by the production of mould, are likely to result. Farmers should therefore pay particular attention to the thrashing of their grain, it being better that a part of the beard should be left adhering to the grain than that any risk should be run of injuring the barley on account of broken and chipped grain.

An old machine is safer for barley than a new one, because when a machine has been worn, the center of the cylinder and concave having had the most work, in consequence of the feeding being necessarily more in the center than at the ends of the drum, the space between them is greater in the center than at the two ends, and if they are set to thresh clean in the center they will be too close at each end, and consequently damage will occur. Let the feed be regular and the work deliberate; and as different barleys require different treatment, those in charge of the threshing should make a point of frequently examining the sample, and if this is injured in any way, of ascertaining in what part of the machine the injury occurs, altering the setting until it is remedied.

The first new wheat shipped in Washington this year was at Quincy, 125 bushels of No. 1 Fife, to the Hammond Milling Co. at Seattle.



## PERSONAL

Ed Rose is managing the farmers' elevator at Hurd, N. D.

C. E. Baur will manage the Cargill Elevator at Yates, Mont.

M. O. Hocum will buy for the farmers' elevator, Grinnell, Iowa.

Will Hite is now in charge of the Ferguson elevator at Etna, Ill.

J. C. Ashley has removed from Garden City, N. D., to Bordulac, N. D.

Oscar Johnson is buyer for the Security Elevator at Franklin, Minn.

Albert Wetter is managing the farmers' elevator at Lanesboro, Iowa.

E. J. Hough is the manager of the farmers' elevator at Buffalo, N. Y.

George Quast will buy grain at Tyler, N. D., during the coming year.

Jno. Bilstein will manage the Monarch Elevator at Little Falls, Minn.

Ed Nugent is buying grain for the Cargill Elevator Co. at Airlie, Minn.

Alex Stewart is the manager of the farmers' elevator at Primghar, Iowa.

J. H. Green is now manager of the Northland Elevator at Mannomen, Minn.

Robert Sannes will have charge of the Great Western Elevator at Gary, Minn.

W. J. Buckner will manage the elevator at Diamond Bluff, Wis., this year.

John Thorvilson has been appointed manager of the elevator at Adams, N. D.

Clifford Shepard will buy grain for the F. H. Shepard elevator at Belfield, N. D.

Joe Ruddy will buy for the Western Elevator Co., at Lebanon, S. D., this season.

C. A. Eglund is the new buyer of the Western Elevator Co., at Darfur, Minn.

Peter Haehn, Vesta, Minn., has taken charge of an elevator at Casselton, N. D.

August Kroenke is the new manager of the Northland Elevator at Kramer, N. D.

O. W. Johnson will manage the St. John Elevator Co.'s business at Amboy, Minn.

John Hagerson will manage the Bennet Grain Co.'s elevator at Lakefield, Minn.

P. G. Melby, of Tyler, is the new buyer at the State elevator, Grove City, Minn.

Henry Wendt, of Mellette, S. D., is buyer for the Bagley elevator at Faulkton, S. D.

Oscar Englestad will buy for the N. J. Olson & Son's elevator at Hannaford, N. D.

Frank Chichester has been employed to manage the new elevator at Sheffield, Iowa.

George Hurd is the buyer for the Eagle Roller Mills Co.'s elevator at Verdon, S. D.

C. A. Serkland, of St. James, Minn., will buy for the Eagle Mill Co., at Crandall, S. D.

J. M. Fosdick, of Maxwell, Iowa, is the new manager of the Neola Elevator at Fonda.

John McGuigan is manager of the Amenita Elevator Co.'s interest at New Albany, Ind.

James Woodard has been appointed manager of the Monarch Elevator at Frazee, Minn.

G. A. Secrest has been employed by the Star Grain and Lumber Co., Franklin, Kan.

Theodore Terhune will manage the Western Lumber & Grain Co. business at Moore, Mont.

Thos. Maxwell, of Fairfax, Minn., is agent for the Northwestern Elevator at Graceville, Minn.

John Adams, formerly of Cleveland, is in charge of the Powers' Elevator at Brinsmade, N. D.

B. J. Murray is in charge of the McCaull-Webster Elevator Co.'s business at Forrestville, S. D.

E. E. Moody, of Wakefield, Kan., will assist in the management of the elevator at Bardolph, Ill.

J. E. Tainter, of Ivanhoe, Minn., is manager for the Western Elevator Co. at Clements, Minn.

R. B. Sackreiter now holds the position of buyer for the Van Dusen Elevator at Sanborn, Minn.

J. D. Lyon has succeeded C. W. Ettes as manager of the Sleepy Eye Elevator, near Hecla, S. D.

George Sullivan has assumed the management of the Lytle Independent Elevator at Moore, Mont.

E. A. Mallory is the new manager of the Farmers' Co-operative Society's elevator at Hampton, Iowa.

B. F. Davis will buy for the Herman Market Co.'s elevator, Herman, Minn., which will open Aug. 15th.

J. C. Riddle has resigned the position of traveling auditor for the Western Elevator Co., at Jewell, Iowa, after thirteen years of service in that capacity.

He has been succeeded by J. H. Barrett, of Minneapolis.

Fred Barchinger, of Lintonville, Minn., is buying grain for the Atlantic Elevator Co., at Elliott, Minn.

E. R. Marquardt has been appointed agent of the Northwestern Elevator Co. at Hamilton, N. D.

Henry Crain is buyer for the new firm that purchased F. W. Obermiller's elevator at Lake Fork, Ill.

Albert Hilke has been employed by the Minnesota & Western Grain Co., to buy grain at Belfield, N. D.

Theo. Witte, formerly of the Northland Elevator, at Kramer, N. D., has been transferred to Wimbledon.

Henry Siemen has been appointed grain buyer for the Sieman Line Elevator Co., near Aberdeen, S. D.

J. A. Frank has removed from Warren, Minn., to Heaton, N. D., where he has charge of the farmers' elevator.

Jas. M. O'Neill, formerly buyer at Holland, Minn., has been engaged for the Northwestern Elevator Co., at Pipestone.

Arthur Moreau has been employed by the St. Anthony Elevator Co., to manage its business at Russia, Minn.

Geo. Ebinghausen, of Grafton, N. D., has been employed to manage the Woodworth elevator at Hallock, Minn.

H. C. Ohlson, of Springfield, Minn., has been engaged as buyer for the Van Dusen-Harrington Co., at Miller, S. D.

J. M. Robinson is in charge of the grain business of Balgour, Guthrie & Co., recently established at Pomeroy, Wash.

Chas. E. Harkins, who has been operating an elevator at Flushing, Mich., is now manager of the elevator at Fenton.

Chas. Stain, who has been manager for the Hoffman Grain Co., at Hill City, Kan., has been transferred to Plainville.

J. A. Emerson, of Mankato, Minn., has secured the position of manager for the Booge Elevator Co. at Valley Spring, S. D.

Will Holms has been succeeded in the position of manager of the Central Granaries Co., at Chester, Neb., by D. J. Howard.

Wilson Canfield, of Winoua, Minn., has been appointed manager for the St. Anthony & Dakota elevator at Hamilton, N. D.

W. L. Kuncze, formerly of the Hiawatha Milling Co., of Hiawatha, Kan., is now traveling for Arms & Kidder, of Kansas City.

Mayor Moberly, formerly with the Oklahoma City Mill & Elevator Co., has opened a wholesale grain office at Oklahoma City, Okla.

Matt Kraemer, who has been in charge of the Woodworth elevator at Hallock, Minn., has been transferred to Parker's Prairie.

William O'Connor will manage the grain and seed business recently established at Melrose, Iowa, by the Wilkin Grain Co., of Albia.

A. H. Bennett, of the Bennett Commission Co., Topeka, Kan., has returned from a short vacation trip to Green Mountain Falls, Colo.

Harry Argall, heretofore buyer at the Northwestern elevator at Benson, Minn., has been promoted to the position of traveling superintendent.

John W. Towle, formerly with the Occidental Elevator Co., at Valley City, N. D., is the new manager of the farmers' elevator at Jamestown.

James O'Brien, late manager of a line of elevators at Grand Forks, N. D., has been transferred to Calgary, Alberta, for a similar position.

H. J. Forgerland has resigned as buyer of the Independent Elevator Co., at Medford, N. D., and has returned to his old home at Sisseton.

Carl Wilkins, who has been with the Norris Grain Co., at Kansas City, has gone to Wichita, where he will be connected with the same firm.

Hayes Esslinger has resigned his position as manager of the Moore Elevator at Hampton, Iowa. He is succeeded by his brother, Lloyd Esslinger.

Frank M. Joice, of Michigan, formerly of Woolstock, Iowa, will manage the Independent Grain and Lumber Co.'s elevator at Eagle Grove, Iowa.

Orin W. Cline has removed from Pilot Mound to Stratford, Iowa, where he has accepted the position of manager for the newly organized Stratford Grain & Supply Co.

J. W. Holmquist, of the firm of Merriam & Holmquist, grain dealers and elevator owners of Omaha, Neb., has removed his residence to that city from Oakland, Neb.

C. W. Lonsdale, formerly with the Home Grain Co., of Kansas City, has organized a new firm to be known as the Lonsdale Grain Co., with offices in the Board of Trade Building, Kansas City; capital \$15,000.

## CROP REPORTS

The wheat crop of Indiana is low in yield and quality this year.

Missouri crop conditions are promising, corn being estimated at 88 as against 86 in July, and 74 a year ago. The wheat crop also is turning out well.

Destructive storms and rains slightly damaged the corn crop in Kentucky on July 31, and damaged much wheat in shock. Corn is reported generally good.

Ohio's state report places the wheat crop at 76 per cent of an average as against 82 per cent a year ago; oats, 92 and 65 last year. The corn promises a bumper crop.

The reports of the various county assessors indicate that Nebraska farmers and others in the state have on hand 10,981,034 bushels of corn more than they did last year at this time.

The Michigan Crop Report, issued August 7, states that the wheat crop in that state is of excellent quality and the yield above the average. The corn condition is given as 84, against 75 a year ago.

The Washington chief grain inspector, S. S. King, of Tacoma, places the wheat crop of that state at 35,000,000 bushels, or 10,000,000 greater than the yield of last year, and within 7,000,000 bushels of the bumper crop of 1907.

Director Chappel, of the Iowa Weather and Crop Service, announces that 50 per cent of the corn crop of that state will be far above the average, and will offset losses sustained on the lowlands caused by the heavy rains in June.

Sec'y G. J. Gibbs, of Texas, has received seventy-five replies to requests sent out to corn producing counties for reports on the corn crop. These replies he has tabulated as follows: Total acreage in corn compared with 1908, 117 per cent; condition July 15, compared with 1908, 74 per cent; estimated yield per acre for 1909, 17 bushels.

H. G. Kaill of the Union Pacific at Kansas City has prepared a report of crop conditions in Kansas which places the corn yield for this season at 219,000,000 bushels and the wheat crop at 78,000,000. Kansas this year is reported to have the largest acreage of corn since 1899, and the highest general average of growing crop since 1902.

The Oklahoma State Board of Agriculture, in its report of July 25, shows a decrease in the growing condition of corn of about 25 per cent as compared with the previous month, and of 12 per cent as compared with same date last year. The average yield of oats this year is given as 82 bushels more than that of last year, with about the same acreage. The wheat crop is better than was predicted earlier in the season, both in yield and grade.

Responses to 3,500 enquiries sent out by the Minneapolis Market Record indicated on August 1 an acreage of wheat in the Northwest of 15,297,000, an increase of 1,080,000 acres and a yield of 259,209,000 bushels, an increase over 1908 of 84,362,000 bushels. The oats acreage is similarly put at 5,625,000 and the yield at 202,316,000 bushels, an increase of 79,180,000 bushels. The barley yield is estimated at 101,602,000 bushels, an increase of 26,180,000 bushels over 1908. In this estimate Minnesota is credited with a wheat yield of 93,415,000 bushels; North Dakota, 115,952,000 bushels and South Dakota, 49,842,000 bushels. Oats—North Dakota, 97,673,000 bushels; Minnesota, 54,871,000 bushels; South Dakota, 49,772,000 bushels. Barley—Minnesota, 39,000,000 bushels; North Dakota, 32,176,000 bushels; South Dakota, 30,426,000 bushels.

The August Crop Report says the average condition of corn on August 1 was 84.4, as compared with 89.3 last month, 82.5 on August 1, 1908, and 82.6, the average of August 1 for the past ten years. Comparisons for important corn states are as follows:

| States.          | Per Cent  | Condition. |           | Ten      |
|------------------|-----------|------------|-----------|----------|
|                  | of U. S.  |            |           | Year     |
|                  | in State. | 1909.      | 1908.     | Average. |
|                  | Acreage   | August 1,  | August 1, | August   |
| Illinois .....   | 9.4       | 91         | 77        | 84       |
| Iowa .....       | 8.6       | 85         | 83        | 84       |
| Texas .....      | 7.6       | 60         | 86        | 76       |
| Missouri .....   | 7.5       | 88         | 74        | 80       |
| Nebraska .....   | 7.3       | 93         | 86        | 83       |
| Kansas .....     | 7.2       | 90         | 76        | 78       |
| Oklahoma .....   | 5.4       | 63         | 80        | 82       |
| Indiana .....    | 4.5       | 94         | 75        | 85       |
| Georgia .....    | 4.1       | 90         | 89        | 86       |
| Ohio .....       | 3.5       | 90         | 85        | 85       |
| Kentucky .....   | 3.3       | 87         | 83        | 84       |
| Tennessee ....   | 3.1       | 78         | 84        | 82       |
| Alabama .....    | 3.0       | 76         | 87        | 82       |
| North Carolina.  | 2.7       | 78         | 91        | 87       |
| Arkansas .....   | 2.7       | 76         | 79        | 81       |
| Mississippi .... | 2.6       | 69         | 86        | 78       |
| Louisiana .....  | 2.0       | 88         | 87        | 80       |
| South Carolina.  | 2.0       | 84         | 88        | 81       |
| South Dakota..   | 1.9       | 92         | 90        | 86       |
| Virginia .....   | 1.9       | 77         | 89        | 88       |
| United States..  | 100.0     | 84.4       | 82.5      | 82.6     |



Preliminary returns indicate a winter wheat yield of about 15.5 bushels per acre, or a total of about 432,920,000 bushels, as compared with 14.4 and 437,908,000 bushels, respectively, as finally estimated last year. The average quality of the crop is 90.3, against 90.1 last year.—The average condition of spring wheat on August 1 was 91.6, as compared with 92.7 last month, 80.7 on August 1, 1908, and 81.1, the ten-year average on August 1.—The average condition of the oats crop on August 1 was 85.5, as compared with 88.3 last month, 76.8 on August 1, 1908, and 83.1, the ten-year average on August 1. Comparisons for important oat states are as follows:

| States.          | Per Cent<br>of U. S.<br>in State.<br>Acreage | Condition.<br>1909.<br>August 1, | 1908.<br>August 1, | Ten<br>Year<br>Average.<br>August 1, |
|------------------|----------------------------------------------|----------------------------------|--------------------|--------------------------------------|
| Illinois .....   | 13.4                                         | 90                               | 58                 | 81                                   |
| Iowa .....       | 13.0                                         | 81                               | 79                 | 85                                   |
| Minnesota .....  | 8.4                                          | 89                               | 80                 | 86                                   |
| Nebraska .....   | 7.6                                          | 80                               | 80                 | 79                                   |
| Wisconsin .....  | 7.0                                          | 84                               | 90                 | 88                                   |
| Indiana .....    | 5.6                                          | 92                               | 58                 | 82                                   |
| Ohio .....       | 5.0                                          | 91                               | 70                 | 87                                   |
| North Dakota...  | 4.6                                          | 92                               | 73                 | 80                                   |
| South Dakota...  | 4.3                                          | 91                               | 87                 | 88                                   |
| Michigan .....   | 4.1                                          | 81                               | 85                 | 90                                   |
| New York .....   | 4.0                                          | 80                               | 90                 | 90                                   |
| Pennsylvania ... | 3.1                                          | 79                               | 86                 | 89                                   |
| Kansas .....     | 3.0                                          | 88                               | 72                 | 67                                   |

United States...100.0 85.5 76.8 83.1

The proportion of last year's oats crop in farmers' hands on August 1 was about 3.3 per cent, or 26,323,000 bushels, as compared with 5 per cent (38,000,000 bushels) of the 1907 crop on hand August 1, 1908, and 6.3 per cent (53,000,000 bushels), the average proportion on hand for the past ten years on August 1. The average condition of barley on August 1 was 85.4, as compared with 90.2 last month, 83.1 on August 1, 1908, 84.5 on August 1, 1907, and 86.1, the ten-year average on August 1. The average condition of flax on August 1 was 92.7, as compared with 95.1 last month, 86.1 on August 1, 1908, 91.9 on August 1, 1907, and 87.7, the average on August 1 for six years. The preliminary estimate of the acreage of hay is 45,581,000 acres, or 1.9 per cent (905,000 acres) less than last year. The average condition of the hay crop on August 1 was 86.8, as compared with a ten-year average on August 1 of approximately 87.

R. H. Ehrle, of Corona, N. D., has been employed to manage the "upper elevator" at Hancock, Minn.

Will Cochrane will have charge of the Ellsworth Mill & Elevator Co.'s elevator at Kanopolis, Kan.

Montana agriculturists estimate the wheat crop of that state at 8,000,000 bushels, or the greatest ever produced by that state.

W. H. Acker, president of the Richmond Elevator Co., and proprietor of the Richmond Bank, with Mrs. Acker, are enjoying the Bankers' excursion to Mackinac Island.

Benjamin C. Christopher, of the firm of B. C. Christopher & Co., grain dealer of Kansas City, Mo., successfully underwent an operation for appendicitis at his home.

E. J. Burke has assumed the management of the Palmerton-Leasure Hay and Grain Co.'s business at Bellingham, Wash. His predecessor, C. W. Nelson, has gone to Tacoma, Wash.

T. Thronson, who has had charge of the Benson Elevator Co.'s business at Benson, Minn., for ten years, has resigned, to go into the hardware business. His successor is L. A. Larson.

P. R. Lilly, formerly manager of the American Elevator company's business at Langdon, N. D., before the destruction of their elevator by tornado, has taken a position in Calgary, Alberta.

O. D. Christenson, who has been in charge of the Minnesota & Western Elevator at Belfield, N. D., has been promoted to a traveling position. He will superintend the business of eighty of the company's elevators.

W. H. Young, of Athens, Ill., who was Superintendent of Exhibits at the National Corn Exposition held at Omaha last year, has been re-elected to that position for the Exposition to be held in December.

W. B. Grobe, of Cleveland, has been appointed traveling superintendent for the Occident Elevator Co. of Jamestown, N. D., having been placed in charge of twenty-four of the eighty elevators belonging to the company.

George Farrell has succeeded J. J. La Due as manager of the large cleaning elevator of the Kasota Elevator Co., at Mankato, Minn. Mr. La Due will soon go to Chicago to take charge of the new general offices of the company.

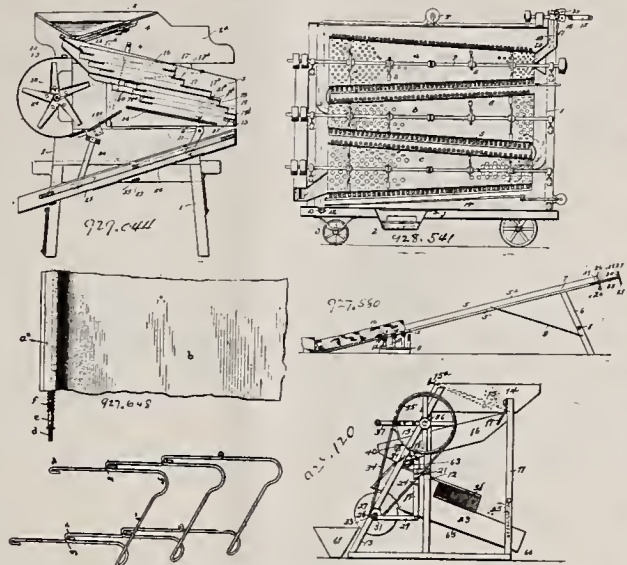
Herbert C. Hawley, on retiring from the position of manager for the J. Cushing Co., after thirty-one years' service, was given a testimonial at Whalon Park, Fitchburg, Mass., by business associates from various parts of New England.

## LATE PATENTS

Issued on July 13, 1909.

Endless Traveling Belt with Standing Sides.—George Gates, Alameda, Cal. Filed April 9, 1908. No. 927,648. See cut.

Grain Door for Cars.—Walter S. Williams, Clinton, Ill., assignor of twenty-eight one-hundredths to Charles W. Pifer, twenty-eight one-hundredths to Charles R. Westcott, and fifteen one-hundredths to William H. H. Hastings, Clinton, Ill. Filed May 25, 1908. No. 927,700.



Grain Door for Cars.—Lee P. Roberts, Minneapolis, Minn. Filed November 27, 1908. No. 928,005.

Seed-Corn Rack.—Martin L. Henderson, Randall, Iowa. Filed February 7, 1908. No. 928,195. See cut.

Device for Transporting and Weighing Baled Hay.—Edward McGlinchay, Galloway, Ohio. Filed August 17, 1908. No. 927,580. See cut.

Seed-Separating Machine.—Edward H. Geise, Newton, Iowa. Filed November 9, 1907. No. 928,120. See cut.

Issued on July 20, 1909.

Alfalfa Drier.—Robert S. Rowland, Oklahoma City, Okla. Filed August 7, 1908. No. 928,541. See cut.

Issued on July 27, 1909.

Grain Separator.—Willis Sperry, Owatonna, Minn. Filed February 16, 1907. No. 929,044. See cut.

### SPECULATION.

That wise kid, "Our Boy Solomon," in King & Co.'s market report of August 7 preached his annual sermon on the text: "Trading In Grain and Clover Seed Futures." Among other things he said:

"Speculation is the cornerstone of wealth. Every man is the architect of his own fortune. Some marry money and trouble. We cannot all select rich parents. Inherited wealth does not always propagate. The third generation generally dissipates it. Lazy money does not move the business world. Most commercial giants inherited brains and nerve, not money. King Patten was a farmer's boy. Waterman, the constitutional bull, was boy packer. Ream, Armour, Cudahy, Carnegie, Morgan, all started poor financially, but rich intellectually. Rockefeller carried newspapers, so did writer, who is still poor. Speculation is not a sure cure for poverty. Farmers speculate upon what crops will produce the best results. Manufacturers, jobbers, and retailers all try to guess the future. Many try real estate, but it's hard to realize on. Some try stocks, but the printing presses make the supply. Grain and clover seed are different. They are international commodities. Supply and demand of the world make the price. Providence does the dealing.

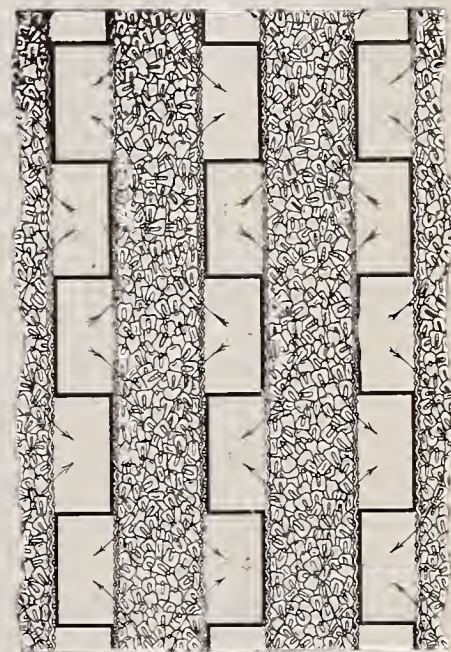
"Look before you leap: Behold the outside world. Don't be prejudiced entirely by your local conditions. Your county is but a fly-speck upon the grain map of the world. United Kingdom is always the largest and a patient buyer. United States and Russia are the largest exporters, but Argentine is nearly as important in both wheat and corn. Wheat is raised almost everywhere. Some country is harvesting almost every month. Present crop promises to be full average, while prices are above, but materially lower than last May. Corn and oats promise big crops and may seek export demand. Farmers have been dictators past season. They are wealthy. Speculation occasionally inflates or depresses prices. Watch the pit conditions, as well as the crops. Select your broker with the same care as you would your family doctor. Consult Dun or Bradstreet as to their financial standing. Get wise before you invest."

Cleveland received its first car of new Ohio wheat on July 23 at Sheets Bros.' elevator.

## THREE FACTS

about the

## ELLIS GRAIN DRIER



### The Ellis Principle

¶ The grain is held in a PERFECTLY EVEN LAYER ONLY 2½ INCHES THICK. A 100-bushel dryer presents a drying surface of 1260 square feet.

¶ The air currents enter the grain layer from BOTH SIDES, forming an air cushion, and then pass both upwards and downwards; thus uniform drying is assured.

¶ EACH BUSHEL of grain is subjected to 260 cubic feet of air per minute.

¶ The ELLIS PRINCIPLE has made possible the ONLY commercially successful COLD AIR DRIER on the market.

Write us for a booklet.

## Ellis Drier Co.

Postal Telegraph Bldg.

CHICAGO



## Grain and Seeds

### KAFFIR CORN AND CANE SEED.

Write us for prices bulk and recleaned, even weight sacked f. o. b. Oklahoma City, Kansas City, St. Louis or Chicago; immediate shipment.

E. R. & D. C. KOLP, Oklahoma City, Okla.

### FLOUR AND MILL FEEDS.

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products.

ANSTED & BURK CO., Springfield, Ohio.

## For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

### CAR LINER FOR SALE.

The best material to patch grain cars is heavy strawboard paper. Easy to use, cheap and efficient; 2c lb. in lots 100 lbs. or more. Address

C. E. CARPENTER, Schoolcraft, Mich.

## ELEVATORS AND MILLS

### FOR SALE OR EXCHANGE.

Ohio, Indiana and Michigan elevators. Have several choice propositions. Let us know your wants. Address

TRI-STATE ELEVATOR CO., Hicksville, Ohio.

### FOR SALE.

Grain elevator. Bin capacity, 10,000 bushels or more; additional capacity, 25,000 bushels. At Mt. Carroll, Ill.; \$3,000 if taken soon. Address

ALLEMAN & HARTMAN, Mt. Carroll, Ill.

### FOR SALE.

Elevators in Illinois and Indiana that handle from 150,000 bushels to 300,000 bushels annually. Good locations. Prices very reasonable. Address

JAMES M. MAGUIRE, Campus, Ill.

### FOR SALE.

Wholesale grain and hay, retail lumber and fuel. Elevator and all buildings new. Doing good business; been established five years. Address

C. H., Box 7, care "American Elevator and Grain Trade," Chicago, Ill.

### FOR SALE.

Elevator with sand and coal business in southern Nebraska. The best grain belt in the West. At a bargain if taken before big movement in new wheat. Write at once to

HELBIG & CO., 529 Bee Bldg., Omaha, Neb.

### FOR SALE.

Small line of elevators, doing a good business, in the best part of southern Minnesota where crop prospects never looked better at this time of year. Reason for selling, too much other business to attend to. Address

LOCK BOX 99, Henderson, Minn.

### FOR SALE.

First-class, paying line of elevators, with cleaning house, southwestern Minnesota and northwestern Iowa, on Omaha Road. One-half cash, balance time, or good improved land. A great opportunity. Write for description. Address

ELEVATOR, Box 7, care "American Elevator and Grain Trade," Chicago, Ill.

### FOR SALE.

Three elevators of 25,000 bushels' capacity each. Located at San Jose, Natrona and Harness, Ill. Also a one-half interest in three elevators. The above property was formerly owned and operated by J. & F. J. Rapp. For further information address

E. M. WAYNE, Delavan, Ill., or FRED W. JACOBS, San Jose, Ill., trustees.

### FOR SALE.

At Thomas, S. D., on the South Dakota Central Railway, modern, up-to-date elevator, erected during the fall of 1908; size, 28x30 feet; 40-foot cribbing; capacity, 25,000 bushels; also flour shed 28x9 feet; coal shed 16x60 feet, five bins; together with the lots on which the buildings stand. Address

C. E. MCKINNEY, Trustee, Sioux Falls, S. D.

### FOR SALE.

For sale, 22,000-bushel elevator, built of 2x6 oak cribbing, weather board siding; 25-horsepower Olds Gasoline Engine, one 12-inch leg. terra cotta engine room and office, private loading switch and ground, connected with the E. J. & E. Ry. and the B. & O., thirty-five miles east of Chicago in first-class grain country. For information write

CADWELL & SALYERS, Malvern, Iowa.

### FOR SALE.

Small mill, fully equipped and running. Stock of grain, farm implements, phosphates, gasoline, oils, etc. Everything new and in good condition. Located in flourishing southern Vermont town on main street and railroad. No competition within six miles. Send for complete description. A real opportunity at small price. Owner has other interests. Address

LOCK BOX 218, Readsboro, Vt.

### FOR SALE.

I will sell my modern, galvanized-iron-covered elevator, feed and meal mill and warehouse at Claude, county seat Armstrong County, Panhandle, Texas. Only one in county; on private switch Ft. Worth & Denver R. R.; the best grain section. Lot is 250x250 feet, three squares from court house. This is a money maker, with great, growing business. Will accept part cash and part good real estate or merchandise. Address, at once,

J. M. HARTER, Wabash, Ind.

### FOR SALE.

Four elevators for sale: White Rock, S. D.; price \$7,000; receipts last year 125,000 bushels; good station, no fight on the market; we made last year at this station \$3,500, and crop prospects for this year are big; capacity 25,000 bushels; have best buyer at White Rock and would want to have him go with the house. Clinton, Minn., 35,000-bushel house; price \$6,000; splendid crop prospects; have the best buyer in that vicinity; will guarantee good profits. Montevideo, Minn., 35,000-bushel elevator; price \$6,000; on the main street; best location in town of only four elevators; immense territory to draw from, and there will be a big and profitable business done at this elevator this year. Granite Falls, Minn., 15,000 bushels' capacity; price \$2,500; has the best buyer in town and gets most of the wheat. We have the above elevators for sale; locations are excellent. We are selling out because we burned out at Montevideo. Address

MONTEVIDEO ROLLER MILL CO., Red Wing, Minn.

## MACHINERY

### ENGINES FOR SALE.

Gasoline engines for sale; 5, 7, 10, 20, 30 and 45 horsepower.

TEMPLE PUMP CO., 15th Place, Chicago, Ill.

### FOR SALE.

One good second-hand steam boiler, 60 horsepower. Will sell cheap. Address

W. H. HURLEY, Clinton, Mo.

### FOR SALE.

One No. 9 Bowsher Grinding Mill, with sacking elevator; one 2½-horsepower gas engine. A bargain. Address

F. GAUVIN, JR., Marlboro, Mass.

### FOR SALE.

A 10-horsepower Fairbanks-Morse Gasoline Engine, used only three days; also one (same make) 7½ k. w. generator complete. A bargain. Address

E. W. WHITE, 405 Sycamore St., Cincinnati, O.

### FOR SALE.

Two boilers, 72x18; head, ½-inch steel; shell, ¾-inch; flues, 4-inch; 88 pounds pressure; made by Murray Iron Works Co. Apply

ROSENBAUM BROTHERS, 77 Board of Trade, Chicago.

### FOR SALE.

Three No. 2 Barnard & Leas Plansifters. Have been used six years, but are in good condition. Will have to be reclothed. Will make low price. Address

OKLAHOMA CITY MILL & ELEVATOR CO., Oklahoma City, Okla.

### FOR SALE.

One new Improved Dustless Eureka Elevator Separator; built by S. Howes Company; largest size made; good as new. Address

CLEANER, Box 6, care "American Elevator and Grain Trade," Chicago, Ill.

## SCALES

### SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

## Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

### PARTNER WANTED.

Good, conservative grain man wanted as partner in line elevators in oat and corn belt of Iowa. Address

K., Box 7, care "American Elevator and Grain Trade," Chicago, Ill.

### WANTED.

To trade about \$20,000 land in Minnesota and Dakota for elevators in Minnesota or Dakotas. Address

A. A. HANSON, 405 Palace Bldg., Minneapolis, Minn.

### PLANS AND MACHINERY WANTED.

A small elevator constructed so as to handle ear corn is soon to be built at Devol, Okla. Parties having plans for same and also concerns who handle elevator machinery will find it to their interest to correspond with

W. T. HUFF or G. W. CHESHER, at Devol, Okla.

## HISTORY OF MAY CORN

My "History of May Corn" Circular gives exhaustive data, covering the present period when corn "is in the making." Sent free.

E. W. WAGNER

98-99-100 Board of Trade

CHICAGO



**HELP WANTED****WANTED.**

Head miller to take charge of 100-barrel mill. One who would take \$3,000 to \$5,000 stock in a first-class mill and elevator. Address.

HARTLEY MILL & ELEVATOR CO., Hartley, Texas.

**POSITIONS WANTED****NOTICE.**

I would like to correspond with parties desiring the services of an experienced man to take charge of an elevator about September 1. Best of reference. Address

C. E. GIBSON, care Bank of Birds, Birds, Ill.

**WANTED.**

Position as grain buyer in Southwest, Oklahoma preferred. Have been buyer for large line company for four years, but desire change of climate on account of wife's health. Address

G. P. GUNDERSON, Devil's Lake, N. D.

**WANTED.**

Experienced, sober, industrious, married man, 29 years of age, wants position as manager of elevator; line company preferred. Now employed satisfactorily save as to location. Prefer central or northern Indiana. Have been with present firm four years. Address

H., Box 6, care "American Elevator and Grain Trade," Chicago, Ill.

**ELEVATORS WANTED****ELEVATOR WANTED.**

Western Ohio or eastern Indiana. Give full particulars and price for cash in first letter.

THE BUCKLAND MILLING CO., Buckland, Ohio.

**WANTED.**

Elevator or mill and elevator for good improved Illinois or Iowa farm. Address

IOWA, Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

**WANTED.**

An elevator in Michigan or northern Indiana or northern Ohio. Give full particulars and price in first letter.

F. KALMBACH, Milan, Mich.

**SAVE TIME,  
LABOR, FUEL**

and avoid exposure to the weather, by installing a **Schmitz Scale Ticket Passer**

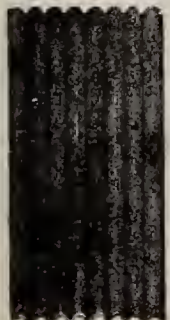
By its use the ticket is passed from the office to teamster with one movement of the hand.

Write for full particulars to

**J. A. SCHMITZ**  
2811 North Hermitage Avenue  
CHICAGO

**ROOFING AND SIDING****SYKES STEEL ROOFING CO.**

114 W. 19th Place, Chicago

**MAKERS OF FIREPROOF WINDOWS**

WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

**Corrugated Iron and  
Metal Roofing  
For Grain Elevators**

And take contracts either for material alone or job completed  
Write us for prices. We can save you money.

**GRAIN RECEIVERS****MILWAUKEE**

O. MOHR, Mgr. G. C. HOLSTEIN, Sec'y-Treas.

**Mohr-Holstein Commission Co.**

29 Chamber of Commerce  
MILWAUKEE

Sample Grain a Specialty  
BRANCH OFFICES AT CHICAGO, MINNEAPOLIS

B. G. Ellsworth, President H. H. Peterson, Vice-President.  
E. H. Hiemke, Secretary

**L. Bartlett & Son Co.**  
GRAIN

COMMISSION MERCHANTS  
Room 23 Chamber of Commerce Building  
MILWAUKEE, WIS.

**The Franke Grain Company**

Receivers and Shippers of

**GRAIN AND MILL-FEED**

Rooms 43-44 Chamber of Commerce  
MILWAUKEE, WIS.

**OUR SPECIALTIES:**

**Malting Barley  
Milling and Distilling Rye**

FAGG & TAYLOR, Shippers  
MILWAUKEE, WIS.

**PEORIA**

ESTABLISHED 1875.

**P. B. & C. C. MILES**  
Grain Commission Merchants  
BUYERS AND SHIPPERS

36-37 Chamber of Commerce, PEORIA, ILL.

A. G. TYNG, Jr. D. D. HALL

**TYNG, HALL & CO.**  
Grain and Commission  
Merchants

Rooms 33 and 35 Chamber of Commerce  
PEORIA, ILLINOIS

**DETROIT**

A. S. DUMONT R. C. ROBERTS R. L. HUGHES

**Dumont, Roberts & Co.**  
RECEIVERS GRAIN SHIPPERS

Chamber of Commerce Merchants Exchange  
DETROIT, MICH. DECATUR, ILL.  
Consignments Solicited. Ask for our bids and quotations.

**CAUGHEY & CARRAN**  
DETROIT, MICH.

Grain and Seed Merchants and Commission  
OUR SPECIALTY: OATS AND CLOVER SEED  
We handle Beans, Barley, Rye, Corn, Wheat. Try us. Liberal advances.

OFFICES: 620 to 624 Chamber of Commerce  
ELEVATOR and SEED HOUSE: Cor. 14th and Baker Sts.

**ST. LOUIS**

**Daniel P. Byrne & Co.**

General Commission Merchants

SUCCESSORS TO

**Redmond Cleary Com. Co.**

Established 1854

Incorporated 1887

**Grain, Hay, Mill Feed and Seeds**

Chamber of Commerce

St. Louis, Missouri.

**Slack-Fuller Grain Co.**

RECEIVERS AND SHIPPERS OF

**GRAIN**

CONSIGNMENTS SOLICITED

208 Merchants' Exchange ST. LOUIS, MO.

Ship your Grain, Hay and Seeds to

**John Mullally Com. Co.**

St. Louis, Mo.

Best of attention paid at all times to all consignments.  
Members St. Louis Merchants' Exchange and Chicago  
Board of Trade.

**PICKER & BEARDSLEY COM. CO.**

St. Louis, Mo.

**GRAIN, HAY and GRASS SEEDS**

We protect your interest on grades and weights and make prompt returns. Try us for RESULTS when you ship to St. Louis. Established 1876.

Thos. Cochrane, Lincoln, Neb.

M. W. Cochrane, St. Louis.

**Cochrane Grain Co.**

Receivers and Shippers of

**GRAIN AND HAY AND SEEDS**

305 and 306 Chamber of Commerce, ST. LOUIS

MARSHALL HALL, Pres.

J. B. BETHUNE, Secy.-Treas.

**W. L. Green Commission Co.**

**GRAIN**

Members { Merchants Exchange of St. Louis.  
Chicago Board of Trade.

203 Merchants Exchange, ST. LOUIS, MO.

**PITTSBURG**

**D. G. Stewart @ Geidel**

GRAIN, HAY AND FEED

RYE A SPECIALTY

Office 1019 Liberty St. Pittsburg, Pa.

Proprietors Iron City Grain Elevator.

Capacity 300,000 bu.

**DECATUR**

**OUR BIDS ARE GOOD ONES**



# GRAIN RECEIVERS

CHICAGO


**E. W. BAILEY & CO.**
**Commission Merchants**

GRAIN, SEEDS AND PROVISIONS

72 Board of Trade

CHICAGO



CHICAGO

GEO. S. DOLE, Pres.

H. N. SAGER, Sec.

**J. H. DOLE & CO.**

(Established 1852)

Commission Merchants, Grain and Seeds

We solicit your  
**CONSIGNMENTS**  
and orders in futures

226 La Salle Street,

CHICAGO

CHICAGO

**C. H. THAYER & CO.**

GRAIN, SEEDS, FUTURES

Your Consignments and Future Orders Solicited

Our untarnished record for more than a quarter of a century, backed up with over \$100,000.00 capital, certainly speaks for itself.

2 and 4 Sherman St., CHICAGO

Minneapolis

Milwaukee

St. Louis

Kansas City

**T. E. WELLS & CO.**

COMMISSION MERCHANTS

1011-1017 ROYAL INSURANCE BUILDING, CHICAGO

Strict attention given to consignments or orders

Oats and Barley Specialties

Liberal Advances Made

W. M. TIMBERLAKE in charge Cash Grain Department

PHILIP H. SCHIFFLIN, Pres.

EUGENE SCHIFFLIN, Secy.-Treas.

**PHILIP H. SCHIFFLIN & CO.**

INCORPORATED

**Commission Merchants**
515-518 Postal Telegraph Bldg.  
CHICAGO, ILLINOISConsignments of all kinds of Grain and Field  
Seeds a specialty

My customers do a profitable business  
because I handle their consignments profit-  
ably at this end. Try me on your Chicago  
cash or future business.

B. S. ARMSTRONG

Postal Telegraph Building

Chicago, Ill.

**Lamson Bros. & Co.**

ESTABLISHED 1874

Commission Merchants

...AND...

Track Buyers of Grain

6 Board of Trade

CHICAGO

BRANCH OFFICES IN IOWA

Des Moines  
Iowa City  
Parkersburg  
Sioux City  
Council BluffsFt. Dodge  
Storm Lake  
Iowa Falls  
IndependenceCedar Rapids  
Waterloo  
Mason City  
Atlantic

Ask for Bids

Consignments Solicited

No ORDER too Large for Me to Execute

Grain Consignments my Specialty

**SAM FINNEY**

715 BOARD OF TRADE, CHICAGO

Or too Small to be Appreciated

W. N. ECKHARDT, Prest. J. W. RADFORD, Vice-Prest.

E. A. DOERN, Secy. C. E. SCARRITT, Treas.

**Pope & Eckhardt Company**

Commission Merchants

Grain and Seeds

317-321 Western Union Building

CHICAGO


**J. ROSENBAUM GRAIN CO.**

(INCORPORATED)

GRAIN MERCHANTS

CHICAGO


**RUMSEY & COMPANY**

COMMISSION MERCHANTS

Consignments a Specialty for Forty Years

Branch Offices  
PEORIA  
ST. LOUISI. P. RUMSEY  
FRANK M. BUNCH  
HENRY A. RUMSEY

J. H. WARE E. F. LELAND

Consign your grain and seeds and send your  
Board of Trade Orders to
**WARE & LELAND**

400-410 Postal Telegraph Bldg. :: CHICAGO

Long Distance Phones : Harrison 4867 and 4868

GRAIN, PROVISIONS,  
STOCKS AND COTTON.

Write for our Daily Market Letter

Your Interests Are Our Interests

Special attention given to cash  
grain shipments



# GRAIN RECEIVERS

## CHICAGO

A. L. SOMERS, Pres. C. W. BUCKLEY, Sec'y and Treas.

### SOMERS, JONES & CO.

(Incorporated)

COMMISSION MERCHANTS

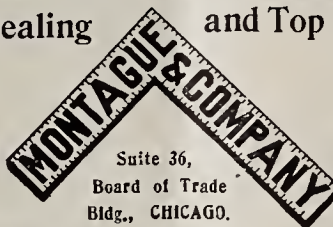
82 Board of Trade Bldg., Chicago

GRAIN AND FIELD SEEDS

CONSIGNMENTS AND ORDERS FOR FUTURE DELIVERY SOLICITED. :: LIBERAL ADVANCES ON CONSIGNMENTS

Square Dealing and Top prices.

If we have not handled your Chicago Business, try us.

Suite 36,  
Board of Trade  
Bldg., CHICAGO.Grain Re-  
ceiving  
and  
Commis-  
sion  
Mer-  
chants.

## NO USE TRYING

to get better service than that afforded by

### CRIGHTON & CO.

402-403 Royal Insurance Bldg.,  
CHICAGO

Send us your consignments and become one of our pleased patrons

## W. H. MERRITT & CO.

GRAIN BUYERS AND  
SHIPPERS

CORRESPONDENCE SOLICITED

87 Board of Trade CHICAGO, ILL.

## J. C. Shaffer & Co.

BUYERS AND SHIPPERS OF  
GRAIN

240 LaSalle St. Chicago

## F. E. WINANS & CO.

GRAIN AND FIELD SEEDS  
COMMISSION MERCHANTSBarley, Oats, Wheat, Corn, Rye, Timothy, Clover,  
Flax, Hungarian Millet

6 SHERMAN STREET, CHICAGO

Write us freely on all matters pertaining to grain and field seeds. Your questions fully and cheerfully answered; particular attention paid to timothy seed and grain by sample. Consignments and speculative orders receive our careful personal attention.

## ARMOUR GRAIN CO.

GRAIN DEALERS

CONSIGNMENTS SOLICITED. This department is fully equipped in every way to give the very best service in Chicago.

205 La Salle St. CHICAGO

## CHICAGO

For Intelligent, Prompt and Efficient Service

Consign to

### Rosenbaum Brothers

Commission Merchants

77 Board of Trade Chicago

J. K. HOOPER President ERVIN A. RICE Vice-President E. G. BROWN Secy-Treas.

### HOOPER GRAIN CO. OAT SHIPPERS

Postal Telegraph Bldg., Chicago

OPERATE ATLANTIC ELEVATOR AND GRAND  
TRUNK WESTERN ELEVATORS, CHICAGO

### H. M. PAYNTER GRAIN COMMISSION

Special attention given consignments of grain  
and seeds

Orders in futures carefully executed

700-718 Royal Insurance Bldg., Chicago

All business transacted through and confirmed by  
H. W. Rogers & Bro.H. W. ROGERS, Pres. J. C. ROGERS, Vice.Pres.  
C. J. HURLBUT, Sec'y and Treas.

### ROGERS GRAIN CO.

(Incorporated)

Buyers, Shippers and Exporters of

GRAIN

Elevator Proprietors on Illinois Central and other  
Railroad Systems

Main Office: 700-701 Royal Insurance Building CHICAGO

## BOGERT, MALTBY & CO.

(INCORPORATED)

COMMISSION MERCHANTS

Correspondence and Consignments Solicited

Orders for futures delivery carefully executed.

Screenings and Mill Feed

306-308 Postal Telegraph Bldg., CHICAGO

## Hulburt, Warren & Chandler

Stock Brokers and Commission  
Merchants, Grain and ProvisionsBusiness solicited in any department  
Receiving, Shipping, Futures

202 LA SALLE ST. CHICAGO

Good Prices  
Prompt Returns  
Very Best Attention

### AND W. A. FRASER CO.

"They're Running Mates"

MINNEAPOLIS CHICAGO MILWAUKEE

## KANSAS CITY

R. J. THRESHER, Pres.

L. A. FULLER, Sec'y

### THRESHER-FULLER GRAIN CO.

Grain Commission Merchants

CONSIGNMENTS SOLICITED

Grain Bought and Sold for Future Delivery

311-14 Board of Trade KANSAS CITY, Mo.

## CLEVELAND

### The Union Elevator Co.

BUYERS AND SHIPPERS

Wheat, Corn, Oats, Hay and Straw

Our Speciality: Recleaned Illinois Shelled Corn

CLEVELAND, O.

## PHILADELPHIA

### L. F. MILLER & SONS,

Receivers and Shippers of

GRAIN, FEED, SEEDS, HAY, ETC.

OFFICE: 2931 N. BROAD ST., PHILADELPHIA, PA.

CONSIGNMENTS SOLICITED. Special attention given to  
the handling of CORN AND OATS.REFERENCES: { Manufacturers' National Bank, Philadelphia, Pa.  
{ Union National Bank, Westminster, Md.

## MINNEAPOLIS

### F. H. PEAVEY & CO.

MINNEAPOLIS,

GRAIN RECEIVERS

MINN.

Consignments Solicited.

MILLING WHEAT A SPECIALITY

### Cargill Elevator Company

WHOLESALE FIELD SEEDS

MINNEAPOLIS,

MINN.

## CINCINNATI

### THE GALE BROS. CO.

Grain Merchants

Largest and best handlers of off grades in the  
central western states. An expert grain man  
at the head of each grain department. Submit  
samples.

CINCINNATI,

OHIO

## LANCASTER

### DO YOU REALIZE

That country trade always pays you  
best in every way?We work a large country business.  
See the point?

JONAS F. EBY &amp; SON, LANCASTER, PA.

## NEW YORK CITY

### BROOKLYN HAY & GRAIN CO.

HAY, STRAW AND GRAIN  
COMMISSION MERCHANTS

ON ALL MARKETS IN NEW YORK HARBOR

Office: Borough of Brooklyn, New York

### FREEMAN BROS. & CO.

Hay, Straw and Grain  
COMMISSION MERCHANTSCorrespondence and Consignments Solicited. . . Market Reports on Application. 66 Board of Trade  
CHICAGO, ILL.

Grain bought and sold for future delivery.



# GRAIN RECEIVERS

## TOLEDO

Grain, Seed and Provision markets are on an Aeroplane basis. Fly with us. Keep posted. Read our specials. Our Boy Solomon will lead you into temptation. Send C. A. King & Co., Toledo, O., your Chicago and Toledo future orders and Toledo cash business. Be friendly. Write occasionally.

### Active Markets

of late give splendid opportunities for trading in futures of grain and seed. For good service send your orders to **Southworth & Co., Toledo, Ohio**

### JOHN WICKENHISER & CO, Buyers and Shippers of Grain

We buy F. O. B. your station for direct shipment to interior points.  
*Personal attention to consignments.*  
**TOLEDO, OHIO**

Frederick W. Rundell James E. Rundell  
ESTABLISHED 1877  
**W. A. RUNDELL & CO.**  
**Grain and Seeds**  
CASH AND FUTURES  
Consignments Solicited Ask for our Daily Grain Bids  
Room No. 33 Produce Exchange, TOLEDO, O.

FRED O. PADDOCK, Pres. JESSE W. YOUNG, V.-Pres.  
ORMOND H. PADDOCK, Secy. & Treas.  
**The Paddock-Hodge Co.**  
**GRAIN**  
TOLEDO, OHIO  
Cash and Futures—Wire, Write or Phone and we will give you our best services.

ESTABLISHED 1868  
**SEEDS**  
We will buy or sell Red and Alsike Clover, also Timothy Seed. Try us.  
**S. W. FLOWER & CO., - Toledo, Ohio**

FRED MAYER FRED JAEGER  
ESTABLISHED 1879.  
**J. F. ZAHM**  
**& COMPANY**  
TOLEDO—OHIO  
Specialists on handling consignments of grain and seeds and filling orders for futures.  
Pay Drafts promptly on all consignments.  
Our Daily Red Letter will be sent for the asking.

## TOLEDO

### The J. J. Coon Grain Co.

GRAIN, SEEDS AND FEED



61 Produce Exchange, TOLEDO, OHIO

Consignments Solicited

Cash and Futures

## BALTIMORE

LOUIS MÜLLER, Pres't. JOHN M. DENNIS, V.-Pres't.  
FERDINAND A. MEYER, Treas.  
THOMAS C. CRAFT, JR., Ass't Treas.

### LOUIS MÜLLER CO.

Grain Receivers and Exporters  
BALTIMORE, MD.  
Members of the Baltimore Chamber of Commerce, Chicago Board of Trade, St. Louis Merchants' Exchange, Grain Dealers' National Association, Indiana Grain Dealers' Association.

GEO. A. HAX Established 1882 J. B. WM. HAX

### G. A. HAX & CO.

GRAIN AND HAY COMMISSION

445 North Street, - - Baltimore, Md.

MEMBERS National Grain Dealers' Association  
National Hay Association

## CAIRO

### H. L. Halliday Milling Co.

RECEIVERS AND SHIPPERS  
CORN-WHEAT-OATS

CAIRO,

ILLINOIS

### REDMAN, MAGEE & CO.

### GRAIN

DELTA ELEVATOR,

Cairo, Ill.

## INDIANAPOLIS

### The Bassett Grain Co.

INDIANAPOLIS

Telephones 80

Board of Trade

## BUFFALO

W. W. ALDER

T. J. STOFER

### ALDER & STOFER

COMMISSION MERCHANTS

We do not buy any grain, but handle on commission, and solicit your Buffalo consignments

83 Chamber of Commerce, Buffalo, N. Y.

### Electric Elevator and Milling Co.

Chamber of Commerce, Buffalo, N. Y.

Elevator Capacity 2,000,000 bu.

Has facilities for cleaning, separating, clipping and sacking grain. Receives and stores all rail and lake grain.

We Solicit Consignments

### RUBINS & BRUSO

Grain and Commission Merchants

Members of all the Principal Exchanges

CONSIGNMENTS SOLICITED

203-216 Chamber of Commerce, BUFFALO, N. Y.

WALTER VOSS  
Manager

New York Office  
305 Produce Exchange

L. S. CHURCHILL, President  
G. W. BARTLETT, Treasurer

### The Churchill Grain & Seed Co.

Commission Orders Executed. Grain and Seed Bought and Sold

Offices: Buffalo, N. Y.

Toledo, Ohio

Seed Warehouse:  
Located at Toledo, Ohio

Members

New York Produce Exchange

Toledo Produce Exchange  
Buffalo Corn Exchange

W. E. TOWNSEND

A. T. WARD

### TOWNSEND-WARD CO.

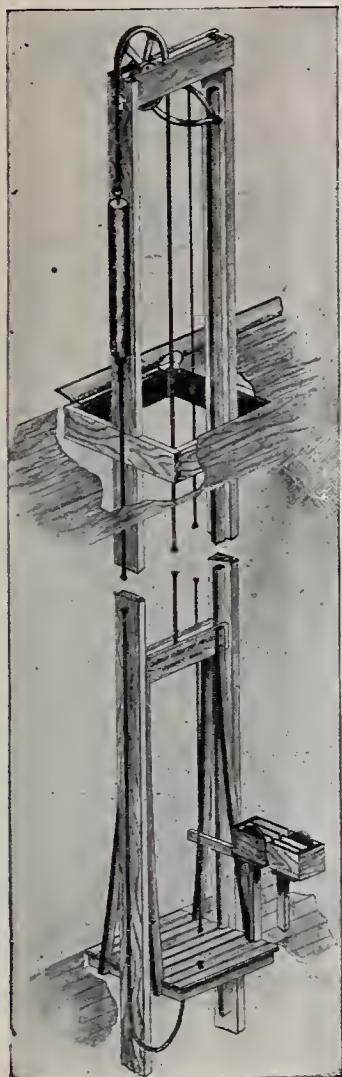
GRAIN COMMISSION

Buffalo, - - - New York

We solicit your consignments for Buffalo market







## The NEW ERA Passenger Elevator

The Standard of Perfection.

Equipped with  
**Newly Improved  
Safety Lock**

the only absolutely dependable  
elevator lock made.

### Other Exclusive Features

make the man lifts *most desirable*.

20,000 users testify as  
to the superior points  
to be found in the  
"New Era."

We make these of steel or wood  
construction, one- or two-pas-  
senger.

Let us equip you.  
Write for prices.

**Sidney Elevator Mfg. Co.**  
SIDNEY, OHIO

## Progressive Grain Men

Are interested in all phases of the grain business, the milling as well as the marketing of grain. They aim to keep in touch with the consuming trade and know what becomes of their grain in the markets of the world. Such men find the

### AMERICAN MILLER

a big help because it fully covers the business of milling wheat and other cereals.

Published on the first of each month, it gives all the news of the milling world and prints a large amount of technical matter that is of interest to the elevator man as well as the miller.

We will send the American Elevator and Grain Trade and American Miller to one address for one year at the combination price of \$2.50. Send in your subscription now.

## EDISON B S C O PRIMARY BATTERIES

The man about to buy batteries for a gas engine ought to know that "dry" cell batteries are the most expensive and most disappointing kind he could get.

Expensive because, though cheap in initial cost, they are soon exhausted and cannot be renewed.

Disappointing because they deteriorate when not in use, become weak with age, are uncertain in their voltage and give out entirely without warning and at most inopportune times.

Edison BSCO Batteries on the other hand, while costing more at first, are never bought but once; when exhausted they can be renewed at small cost and each renewal is equivalent to new batteries. As there is no deterioration when not in use, every particle of current in them is available for ignition purposes.

You know in advance what to expect of them and are never left without power. The current is as strong and steady on the last day of their life as on the first day, doing its work without attention.

If you are interested in batteries for a gas engine, write for our booklet. It will tell you just what to get and what to expect from what you get.

**Edison Manufacturing Company**

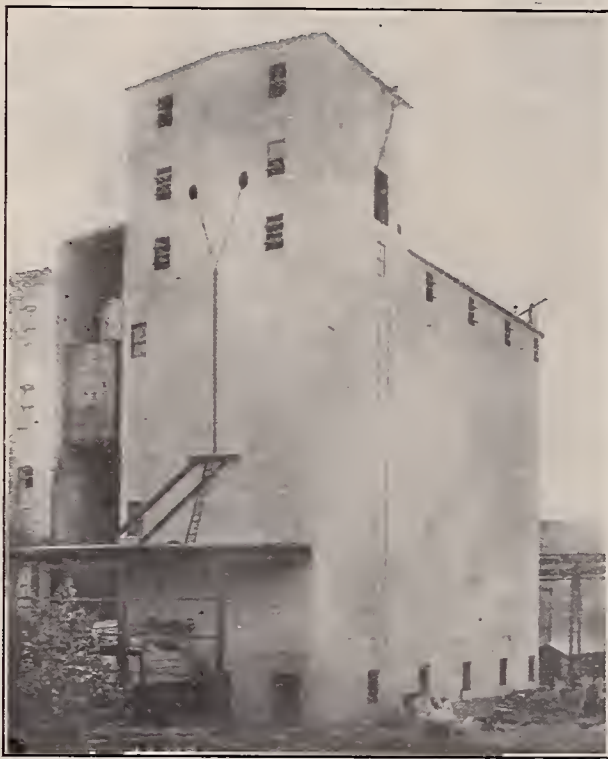
1 Lakeside Avenue

Orange, N. J.



## YOU COULDN'T

BURN THIS ONE DOWN IF YOU TRIED



It is built entirely of Concrete and Steel, and we put it up in 60 days, If you are about to build you had better see us, or let us know when and where we can see you.

**MACDONALD ENGINEERING CO.**

Specialists in Concrete

549-53 Monadnock Bldg.

CHICAGO

## Witherspoon-Englar Company

Designers and Builders of

## FIREPROOF Grain Elevators



Cut shows four reinforced concrete grain tanks 30 ft. diameter, 60 ft. high, connected with brick operating house 30x60 feet, erected for the American Maize Products Co. at Roby, Ind.

Designs and estimates promptly furnished for all kinds of buildings for the handling and storage of grain in any locality.

1244-1250 Monadnock Building, Chicago, Ill.

## John S. Metcalf Co.

Builders of

*Terminal Elevators*

*Concrete Storage Bins*

*Transfer Elevators*

**Drawings and Specifications**

THE TEMPLE, CHICAGO

**YOUNGLOVE** Builds **ELEVATORS** complete, or will furnish and install your repairs. We have the men and make this a specialty.

YOUNGLOVE CONSTRUCTION CO., 219 Grain Exchange, Sioux City, Iowa.



**C. E. BIRD & CO.**  
**GRAIN ELEVATOR BUILDERS**

318 Corn Exchange, MINNEAPOLIS, MINN.

In 15 years' experience we have no unsatisfied patrons.



## The No Back Pressure "1905" CYCLONE Dust Collector

"The 1905 Cyclone is from 27% to 39% more efficient than the old Cyclone considering both power consumed and quantity of air discharged."

The Mechanical Engineering Dept.,  
UNIVERSITY OF MICHIGAN.

"The velocity of air on suction side of fan is always greater in the "1905" Cyclone Collector, due to its lower resistance and consequent greater air handling capacity."

The Mechanical Engineering Dept.,  
UNIVERSITY OF MICHIGAN.

"The per cent of loss saved by the "1905" Cyclone over the old Cyclone is from 71.2% to 80%. These losses are due to the dust collector friction and take into consideration nothing but the collector."

The Mechanical Engineering Dept.,  
UNIVERSITY OF MICHIGAN.

The New Cyclone "1905" manufactured exclusively by

**THE KNICKERBOCKER COMPANY**  
JACKSON, MICHIGAN



# JAMES STEWART & CO.

## GRAIN ELEVATOR DEPARTMENT

1811 Fisher Building

W. R. SINKS, Manager

CHICAGO

R. H. FOLWELL, Engineer



Grand Trunk Pacific Railway Co. Elevators in Process of Construction at Fort William, Ont.  
Capacity 3,500,000 Bushels.

### We Build Grain Elevators, Any Type of Construction, in Any Part of the World

Also General Contractors with Offices in the Following Cities,  
Wire, Write or Call Personally.

NEW YORK, Hudson Terminal Building  
PITTSBURGH, PA., Westinghouse Building  
SAN FRANCISCO, CAL., 709 Mission Street

ST. LOUIS, MO., Bank of Commerce Building  
NEW ORLEANS, LA., Hibernia Bank Building  
DENVER, COLO., 1st National Bank Building

CANADIAN STEWART CO., Ltd., Montreal, Can., Eastern Townships Bank Building  
FORT WILLIAM, Ontario, Canada



## Fireproof Grain Elevator

Recently completed for the Chicago, Burlington & Quincy  
Railway Co. at Harlem (Kansas City), Missouri.

This elevator is an entirely new type throughout, origi-  
nated, designed and constructed by

## The Barnett & Record Company

Engineers and General Contractors

MINNEAPOLIS, MINNESOTA

GRAIN ELEVATOR  
PLANS AND SPECIFICATIONS

## MOULTON & EVANS

406 CORN EXCHANGE

MINNEAPOLIS - MINNESOTA

GRAIN ELEVATOR  
CONSTRUCTION OUR SPECIALTY

Telephone, Monroe 1614

## OLSON BROTHERS & CO.

ENGINEERS and CONTRACTORS

Grain Elevator Construction Power Transmission

Elevating and Conveying Machinery

703-707 Bloomingdale Avenue

CHICAGO



## Fred Friedline & Company

DESIGNERS AND BUILDERS

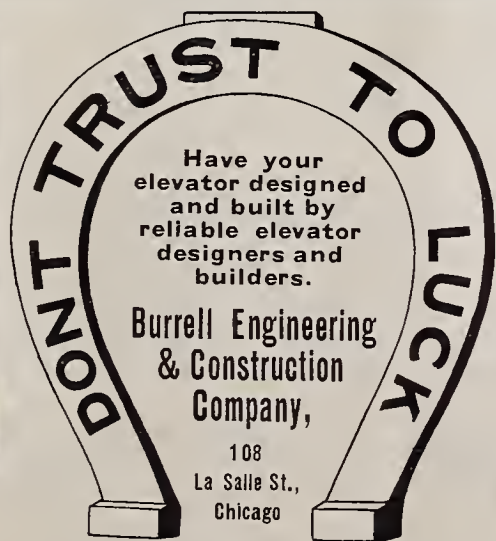
Transfer, Terminal and Country Elevators,  
Warehouses, Tankage in Frame, Iron-Clad  
or Fire-Proof Construction, Concrete Tanks

Plans and Specifications a Specialty.  
Write for Sketches and Estimates.

253-261 La Salle Street, CHICAGO.  
C. M. SECKNER FRED FRIEDLINE



Long Distance Telephone  
Main 799



## G. T. HONSTAIN

Contractor and Builder of

## Grain Elevators

29th St. and Grand Ave.

MINNEAPOLIS - MINN.

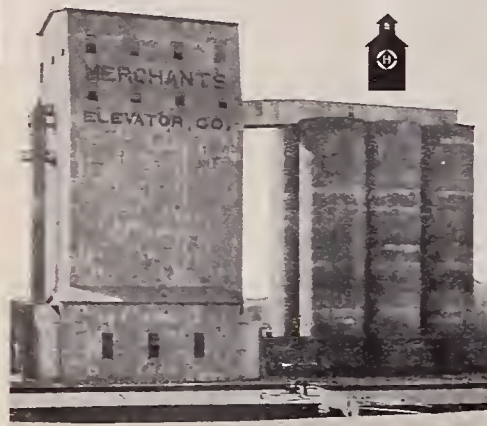


A few elevators recently completed

|                                         |                       |
|-----------------------------------------|-----------------------|
| Northwestern Consol. Mill. Co., Minn.'s | 1,000,000             |
| Nebraska City & Ill. Ele. Co. Chicago   | 2,000,000             |
| Bartlett Frazier Co.                    | 1,000,000             |
| H. Rogers Co. St. Louis                 | 500,000               |
| F. H. Peavey & Co. Minneapolis          | 1,000,000             |
| S. S. Linton & Co.                      | 600,000               |
| Interstate Grain Co.                    | 450,000               |
| City Elevator Co.                       | 500,000               |
| Security Grain Co.                      | 400,000               |
| Royal Milling Co. Great Falls, Mont.    | 100,000               |
| Jennison Bros. Janesville, Minn.        | 100,000               |
| 400 country elevators                   | from 10,000 to 50,000 |



## GRAIN ELEVATORS



### STORAGE TANKS or WAREHOUSES

IN

Wood or FIRE-PROOF Materials

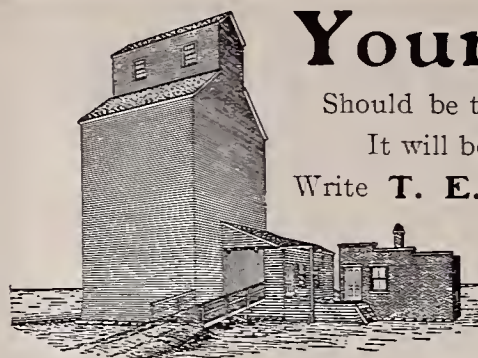
PLANS—SPECIFICATIONS—ESTIMATES

We design and erect the structural work and mechanical equipment of Grain Handling or Storage Plants from a country receiving station to a terminal transfer house.

**L. O. HICKOK & SON**

Engineers and Contractors

320 Flour Ex'ge Minneapolis, Minn.



## Your Elevator

Should be the best that money can buy.

It will be if IBBERSON builds it.

Write **T. E. IBBERSON**, 308-310-312

Corn Exchange, Minneapolis, Minnesota.

**He Knows How.**

## STEEL STORAGE & ELEVATOR CONSTRUCTION CO.

DESIGNERS AND BUILDERS OF

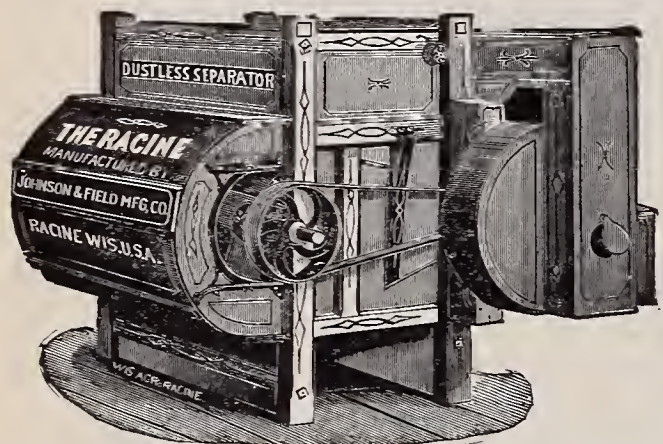
## STEEL OR CONCRETE GRAIN ELEVATORS

BUFFALO, N. Y.

## "The Racine" Dustless Grain Separator

Embodies more Points of Excellence than any other machine offered for similar purposes, and is Light Running, Large in Capacity, Perfect in Separation and with Great Strength and Durability.

MADE IN DIFFERENT SIZES TO MEET DIFFERENT REQUIREMENTS.



### The Racine Heavy Warehouse Mill

Is built extra heavy and bolted throughout. This machine has large capacity and is more durable than any other Warehouse Mill made.

### ELEVATOR MACHINERY AND SUPPLIES

Send for catalogue before placing order.

JOHNSON &amp; FIELD MFG. CO., Racine, Wis.

**G. H. BIRCHARD**  
Contractor of  
**Grain Elevators**  
Especially Designed for Economy of  
Operation and Maintenance  
LINCOLN, NEB.

**N. A. GRABILL**  
FURNISHER AND BUILDER OF  
**MILLS AND ELEVATORS**  
DALEVILLE, IND.  
Indianapolis Office, 617 Board of Trade Bldg.  
Also State Representative for  
JOHNSON'S GRAIN DRYER & RENOVATOR

## SEEDS

### THE ALBERT DICKINSON CO.

DEALERS IN

GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS,  
PEAS, POPCORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC.  
CHICAGO, Ill. Branch: Minneapolis, Minn.

## The BOOK of CORN

SHOULD BE ON THE DESK OF EVERY  
ELEVATOR MAN WHO HANDLES CORN

It is the only work that covers the field from the growing to the final disposition of the cereal. An exhaustive treatise on corn growing, breeding, marketing, etc.

The book has been prepared by specialists, under the direction of Herbert Myrick, and covers all features of the corn business. It tells not only how corn should be treated by the farmer as producer in every step of the program of corn culture, but also how to market corn and what ultimately becomes of it—on the farm, as feed; or in the world's markets as the raw material of vast manufacturing industries . . . . . Price, \$1.50 per copy

For sale by **MITCHELL BROTHERS CO.**  
315 DEARBORN STREET, CHICAGO, ILLINOIS

## The Wiederholdt System

### Reinforced Tile Concrete

THE MOST IMPROVED AND APPROVED SYSTEM FOR

**Grain Elevators, Mill Construction,  
Grain Bins, Silos, Storage Bins,  
Tanks, etc.**

BUILT EXCLUSIVELY BY

**Wiederholdt Construction Co.**

606-607 New National Bank of Commerce Bldg.,  
ST. LOUIS, MO.

## MINNEAPOLIS STEEL & MACHINERY COMPANY

DESIGNERS AND BUILDERS OF

## Steel Elevators with Full Equipments

Give us the opportunity to submit you plans and estimates. We can please you. Ask us for Catalogue "A" Twin City Corliss Engine and Catalogue "F" Elevator and Power Transmitting Machinery.

**MINNEAPOLIS STEEL & MACHINERY CO.**

MINNEAPOLIS, MINN.







### GOOD JUDGMENT

for fire insurance is to select the company patronized by your fellow grain dealers. The



Is insuring over 2,200 country elevators for over \$9,000,000. For conditions to unite with them, write

**C. A. McCOTTER, Secretary.**

### Millers' Mutual Fire Insurance Association

Of Illinois

ALTON, ILLINOIS

Established 1878

Insurance on Flour Mills and Elevator Properties.

Cash Assets - - \$366,891.05

A. R. McKinney, Sec'y

### Millers' National Insurance Co.

205 LA SALLE STREET

CHICAGO - - ILL.

CHARTERED 1865

Insurance with a maximum of security at a minimum of cost for **ELEVATORS, WAREHOUSES and CONTENTS**, on the Mutual Plan.

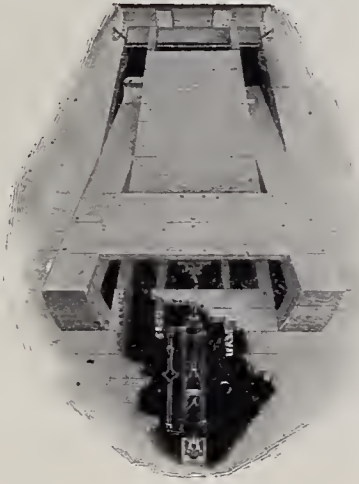
Five-Year Policies or short term policies on grain, if required.

Semi-Annual Assessments costing about one-half Stock Company Rates.

No conflagration hazard.

Gross Assets..... \$5,288,714.18  
Net Cash Surplus .... \$930,166.99

### Reliance Automatic Dump Controller



This device is the only Automatic dump controller on the market that requires neither hand nor power to operate.

It causes the dump to settle down easily without the least jar or jerk and prevents accident to wagon or team.

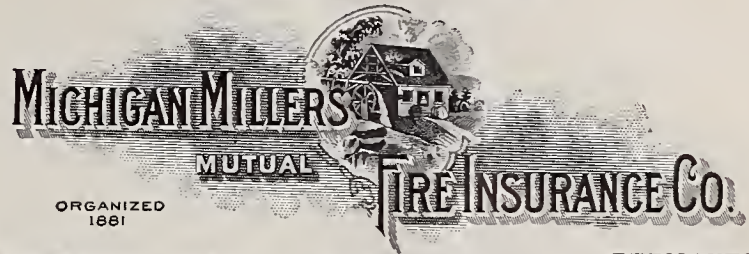
This device is a small cylinder filled with cold tested oil in which travels a piston which is attached to the front end of the dump. The motion of the dump is controlled by the forcing of this oil through a regulating valve, which can be adjusted to suit operator.

Equip your dumps with them and avoid accident in the handling of the coming crops.  
Shipped on trial to responsible parties.  
Write us for particulars and price.

**RELiance CONSTRUCTION CO.,**

625 Board of Trade Building, Indianapolis, Ind.

### THE OLD RELIABLE



INSURES ELEVATORS AND GRAIN

LANSING, MICH.

PERMANENT OR SHORT TERM POLICIES

### JEFFREY MACHINERY FOR GRAIN ELEVATORS

INCLUDES CONVEYERS

Spiral, Belt and Bucket types, Elevators, Sprocket Wheels, Link Belting, Elevator Boots, Chains—Standard and Special.

WE BUILD

Elevating and Conveying Systems in any capacities and to suit any conditions.

THE **JEFFERY MFG. CO.,**  
COLUMBUS, OHIO.

New York.  
Chicago.  
Boston.  
St. Louis  
Denver.

Pittsburgh.  
Knoxville.  
Charleston, W. Va.  
Montreal, Canada.  
Buffalo.  
Wilkes Barre, Pa.

WANT ADS in this paper bring results.  
Rates on application.

### LEWIS GAS ENGINES

ALWAYS FILL THE BILL

Starts without cranking. Patented features make it more durable, smoother running, easier working than ordinary engines. Automatically adjusts itself—a light impulse for light work—powerful impulse for heavy load—saving fuel, wear and tear. Sold for twenty years. Thousands in use. Tell us what you will use it for and we will recommend size and give price.

WRITE TO-DAY

**J. Thompson & Sons Mfg. Co.**

Dept 11, BELOIT, WIS.

CHAIN BELTING FOR EVERY MACHINE. WRITE FOR LOW PRICES. THE C.O. BARTLETT & SNOW CO. CLEVELAND, O.

### MILL OWNERS' Mutual Fire Insurance COMPANY

DES MOINES, IOWA  
Organized 1875

Insures Mills, Elevators, Warehouses and contents

Net Cash Assets ..... \$261,480.33  
Losses Paid..... \$1,473,780.50  
Saved to Policy Holders .. \$1,909,196.60

**J. T. SHARP, Sec.**



**DUST! DUST! GIBBS PATENT DUST PROTECTOR** is invaluable to operatives in every industry where dust is troublesome. It has been thoroughly tested for many years in every kind of dust, and is the most reliable protector known. Perfect Ventilation. Nickel-plated protector, \$1. postpaid. Circular free. Agents wanted. **GIBBS RESPIRATOR CO.,** "B" 124 East Ave., Oak Park (Chicago), Ill.

ROCKFORD

Address **ROCKFORD ENGINE WORKS**  
Dept. 7 Rockford, Ill., U. S. A.

The **ELEVATOR ENGINES** The Engine that will please you.

From 2 to 30 H. P. any style. Write for special price.

NEAT—NOBBY—HANDY

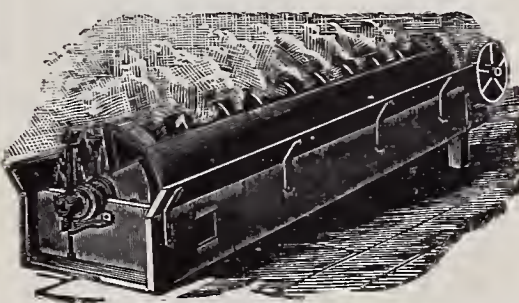
ROCKFORD

Mention this paper.

**J. A. Horn Construction Company**  
Oklahoma City, Okla.  
DESIGNERS AND BUILDERS OF  
**Grain Elevators, Alfalfa Meal Mills.**  
Complete Equipments Furnished.

SEE THAT YOUR CONTRACTS CALL FOR

### THE CUTLER STEAM DRYER



SOLD BY ALL MILL FURNISHERS

Not an Experiment. In successful use 25 years drying CORN MEAL AND HOMINY.

BREWERS' GRITS AND MEAL.

BUCKWHEAT, RICE AND

ALL CEREAL PRODUCTS.

ALSO SAND, COAL DUST, GRAPHITE, CLAY AND ORES

Automatic in operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

**THE CUTLER CO., North Wilbraham, Mass.**  
CATALOG ON REQUEST

### Don't Buy Gasoline Engines

space occupied and practical overcoming of vibrations. Costs less to buy—less to run. Send for Catalogue.

**THE TEMPLE PUMP COMPANY, Manufacturers,**

until you investigate "The Master Workman," a two-cylinder gasoline, kerosene or alcohol engine, superior to any one-cylinder engine; revolutionizing power. Its weight and bulk are half that of single-cylinder engines, with greater durability. Endorsed by the Board of Underwriters. Especially adapted for grain elevator work, owing to steady pull, quick and easy starting, small This is our 55th year.

Meagher and 15th Streets, CHICAGO



### A CHOKED BOOT IS AN INTERRUPTION OF BUSINESS

Nobody relishes arbitrary interruption.

A boot always chokes when you are in a hurry—often other times.

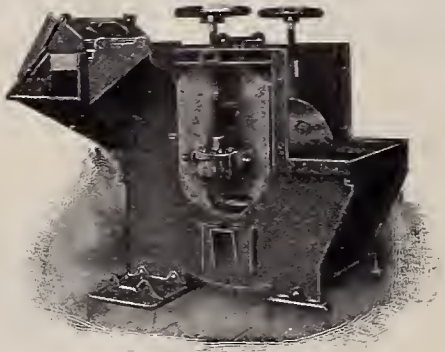
Your attempt to hurry, causes it. Then you are delayed, stopped, interrupted, by a malperformance.

Nobody wants that. Nobody can defend that.

It is an abomination.

The thing to do is to positively avoid it, by substituting a

### HALL NON-CHOKABLE BOOT



which is absolutely the only way it can be avoided. After that all interruptions cease.

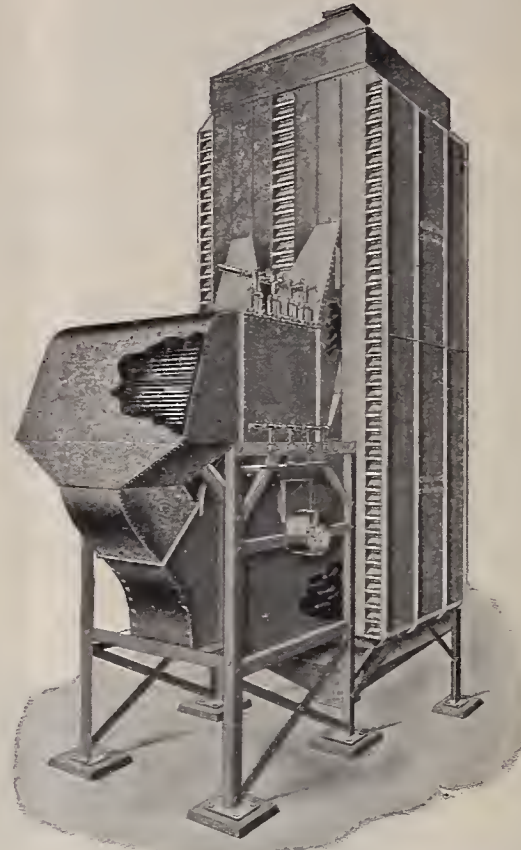
Your work goes smoothly along, every cup full; fed automatically, no attention required and **your capacity doubled.**

Sent free on trial and proved before acceptance.

Catalogue E illustrates it all.

**HALL DISTRIBUTOR CO.,** 506 Ramge Building,  
OMAHA, NEBRASKA

## HESS=DRIED IS Best Dried



HESS GRAIN DRIERS are used everywhere, by Grain Handlers, large and small.

We make small sizes for country elevators and large ones for terminal elevators; eight regular sizes in all.

No. 3 Ideal HESS Drier and Cooler. *Send for Booklet.*  
The Car-load a Day size.

**Hess Warming and Ventilating Co.**

910 Tacoma Bldg., CHICAGO.

## GURNEY Standard Scales

The great majority of the elevators throughout the Canadian Northwest are equipped with Gurney Scales.

Also found in terminal elevators in Halifax, St. John, Quebec, Montreal, Sarnia, Midland, Fort William, and a recent order was for the complete scale equipment (ten 2,000-bushel hopper scales) for the Grand Trunk Pacific Railway elevator at Fort William.

**Write us for Estimate on Your Scale Equipment for Delivery Either in Canada or United States**

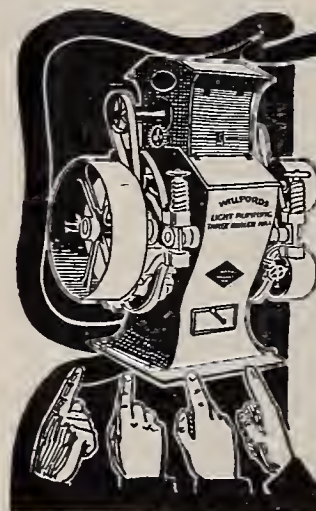
Scales of every description, including the best type of Automatic scales.

### THE GURNEY SCALE CO.

Established 1856

Hamilton, Ont., Canada.

MONTREAL WINNIPEG CALGARY VANCOUVER



### 4 GOOD POINTERS

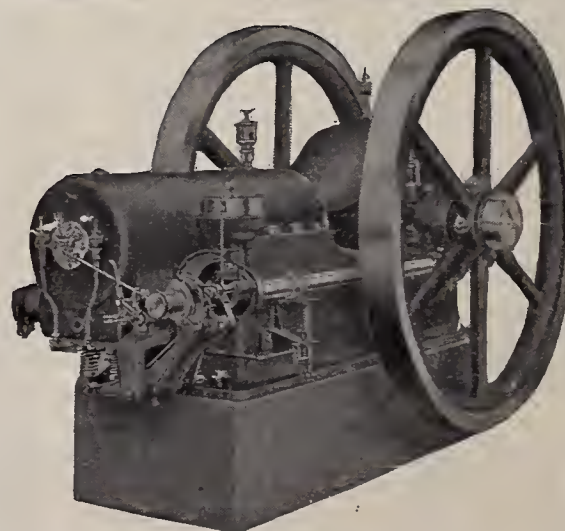
ON THE

Willford Three-Roller Feed Mill.

- (1) It is Easy to Handle.
- (2) It is Strong and Durable, but Simple.
- (3) It will Grind the Most Feed with the Least Power.
- (4) It can Always be Relied Upon.

Write for Circulars and Prices.

**WILLFORD MANUFACTURING CO.,**  
303 3d St. South, MINNEAPOLIS, MINN.



## The Field Engine

Important Features

All Engines equipped with Automatic Starting device. Igniter points may be cleaned and speed of Engine changed without stopping and without handling any moving parts. All Valves and Igniter are mechanically operated. There are no water packing joints on the FIELD through which water can leak into the cylinder. All engines are constructed to carry a compression of 70 lbs. on gasoline, 100 lbs. on gas and 140 lbs. on alcohol, insuring the highest efficiency. We have eighteen distributing points in the United States. Catalog No. 60 gives other features of exceptional merit. Your postal will bring it.

**THE FIELD-BRUNDAGE CO.,**

Jackson, Michigan



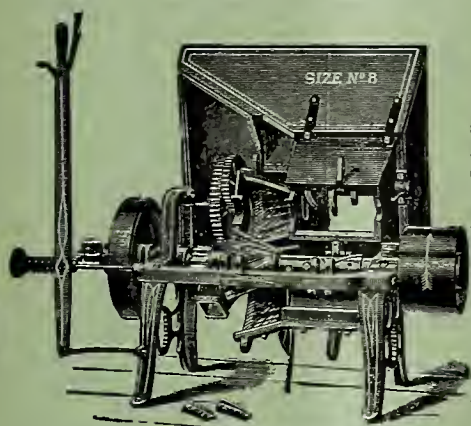
## Did It Ever Occur to You

That the best way to get what you want, and get it promptly, is to send your orders to people who have had experience in the business and who carry a stock of goods always ready for quick shipment? We have been in the Elevator and Mill Furnishing business over twenty-five years and feel that we know something about it. We carry in stock a complete line of supplies, including Testing Sieves, Transmission Rope, Belting, Steel Split Pulleys in sizes up to 54-inch, Elevator Buckets, Conveyor Chain Belting, Sprockets, Lace Leather, Scoops, Shafting, Collars, Bearings, etc., etc. Send us your orders. We will satisfy you.

THE  
**STRONG-SCOTT MANUFACTURING CO.**  
MINNEAPOLIS, MINN.

Northwestern Agents for The Great Western Mfg. Co., Richardson Automatic Scales, Invincible Cleaners, Knickerbocker Dust Collectors

## Bowsher's All-Around Feed Mill



(Sold with or without sacking elevator)

It CRUSHES ear corn (with or without shucks) and GRINDS all kinds small grain and KAFFIR IN THE HEAD. Has CONICAL shaped GRINDERS, DIFFERENT FROM ALL OTHERS. RUNS LIGHT. Can run EMPTY WITHOUT INJURY. Ahead of rolls or stones in speed and quality of work.

YOU NEED a mill now. Quit THINKING about it. COMMENCE to investigate. Give US a chance and we'll tell you WHY we think ours is the best.

SEVEN SIZES: 2 to 25 H. P.  
Circular sent for the asking.

Drive pulley overhung. Belt to it from any direction. Makes complete independent outfit.

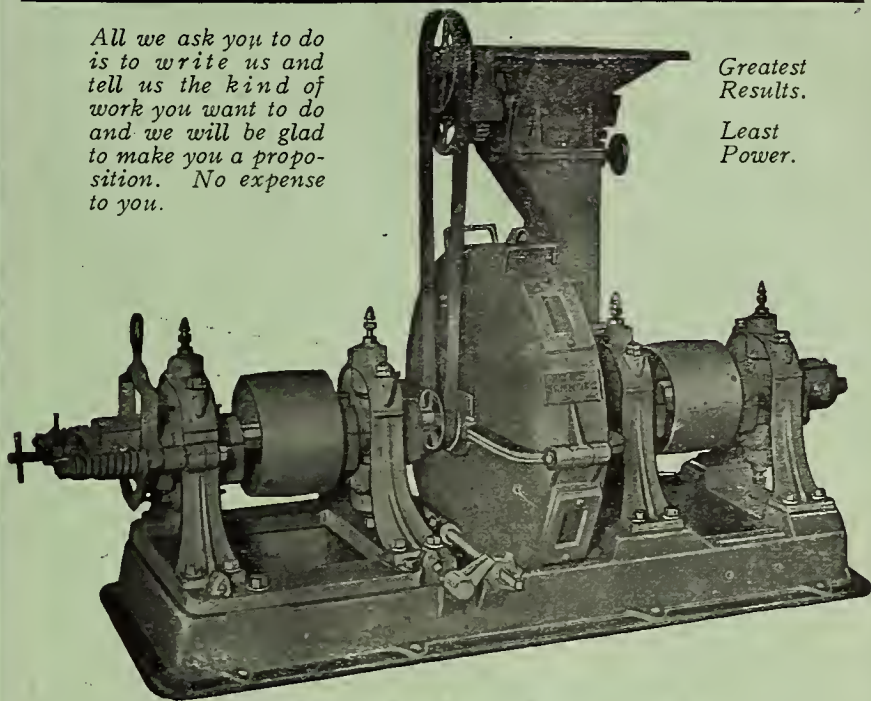
THE N. P. BOWSHER CO., South Bend., Ind.

## SCIENTIFIC Attrition Mills

All we ask you to do is to write us and tell us the kind of work you want to do and we will be glad to make you a proposition. No expense to you.

Greatest Results.

Least Power.



Built for FAST, FINE GRINDING. Grinds Corn, Chop Feed, Bran, Offal, Screenings, Small Grain, and a great variety of other products.

Our new Catalogue is ready and we will be pleased to send you a copy.

THE FOOS MFG. CO.  
(Builders of Attrition Mills since 1878)  
SPRINGFIELD, OHIO

## Fairbanks Automatic Scale

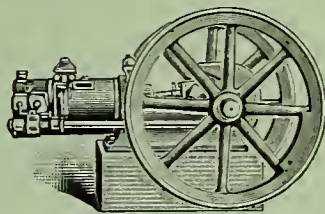
Put your mill or elevator on a modern business basis. No more losses through carelessness or inaccurate weighing. Faster, more convenient, and, above all, more accurate than any other automatic scale ever invented.

Write to-day for automatic scale catalog No. 544 A W

**Fairbanks, Morse & Co.**  
CHICAGO, ILL.



## For Elevator Service



**"OTTO"**  
Gasoline Engines

There are many reasons why "Otto" Engines are the most desirable for service in grain elevators.

"Otto" water jackets are cast separate from the cylinder.

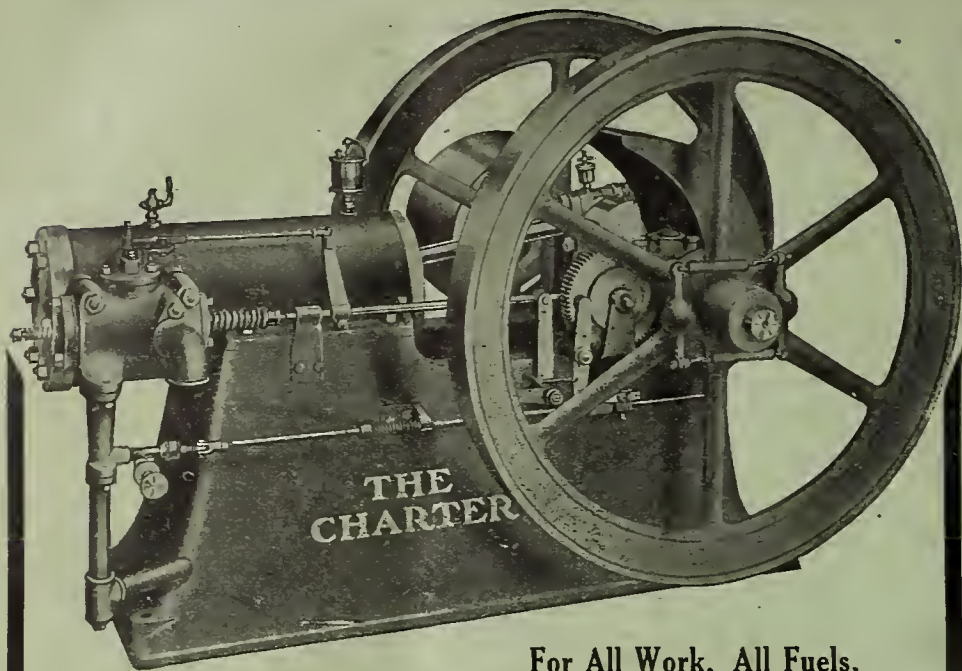
"Otto" electric ignition is safe and sure. "Otto" and "Economy" are synonyms. "Otto" design, workmanship and materials are unequalled.

"Otto" engines deliver their actual rated horsepower and we are often able to recommend a smaller engine than the customer would select. The construction is such that water is used economically and the gasoline consumption is small.

We have a large, illustrated catalogue fully describing our line and will send you a copy free if you will write for it.

**The Otto Gas Engine Works**  
Philadelphia, Pa.



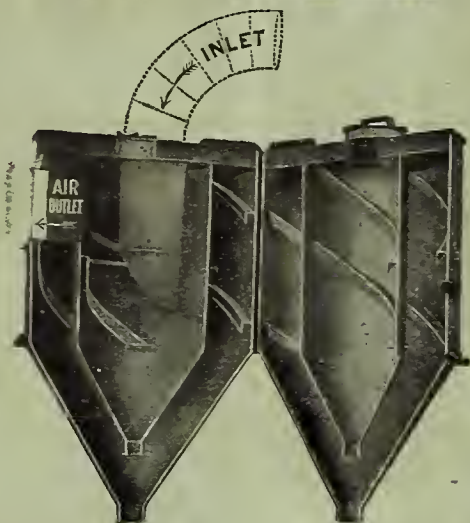


For All Work, All Fuels.

Send for printed matter and state your needs.

Charter Gas Engine Co., 400 Locust St., Sterling, Ill.

**DIXON'S SILICA-GRAPHITE PAINT**  
 THE PROVEN SHIELD FOR IRON AND STEEL. INERT  
 PIGMENTS. GOOD COVERING CAPACITY. DURABILITY  
 RECORDS IN ALL CLIMATES. Write for Booklet 17-B.  
 JOSEPH DIXON CRUCIBLE COMPANY, JERSEY CITY, N. J.



Points regarding the  
**Day Dust Collector**  
 to bear in mind.

It saves Power in operating  
 your Cleaning Machine

One of many unsolicited credentials:

January 8th, 1909.  
 "Just got the Collector placed and it works  
 like a charm. It's simply a dandy—can't be  
 beat."  
 CAMBRIDGE MILLING CO.

Write Us

Please give inside measurements  
 of Fan outlet (or if two fans meas-  
 urement of each) on cleaning  
 machine for which Collector is  
 wanted in writing for prices.

**THE DAY COMPANY** 1118-26 Yale Place  
 MINNEAPOLIS, MINN.

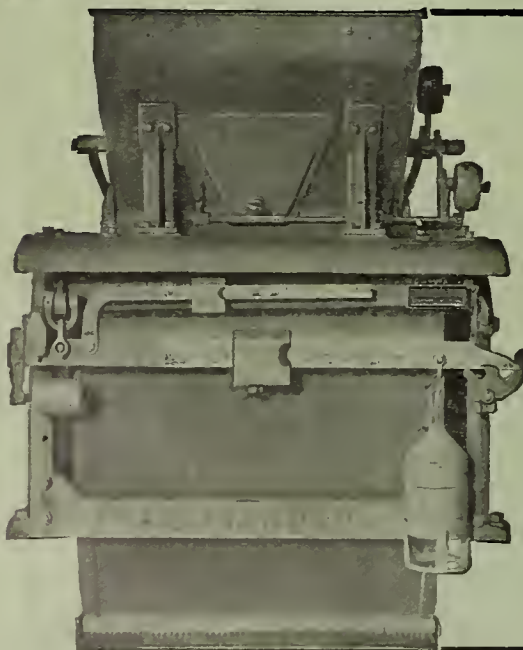
**A GOOD RECORD FOR A NEW VENTURE.**

100 % more Kennedy Car Liners sold since June 1st, 1909, than during same period in 1908  
 and 1000 % more than in same period of 1907.

The record our best endorsement.

Order someday.

**FRED. W. KENNEDY,** Made by Shelbyville, Ind.



Before Buying an  
Automatic  
Scale  
 See the  
**SONANDER**

Power Appliance  
 Mfg. Co.,

412 S. 3d St., Minneapolis, Minn.

Elevator Outfits and Supplies

# WEBSTER Machinery

FOR HANDLING GRAIN



Floating Transfer Elevator Erected for Girard Point Storage Co., Philadelphia.

We Design, Manufacture and Install Complete Equipments  
 to suit all conditions.

**WEBSTER MFG CO.**

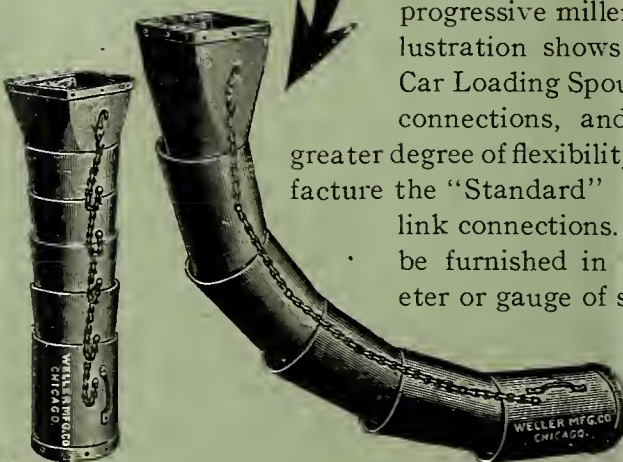
Main Office and Works: 1075-1111 West 15th St., Chicago

Eastern Branches:

88-90 Reade St., New York.

Pennsylvania Bldg., Philadelphia.

## This WELLER-Made Car Loading Spout



is the type now in use by most  
 progressive millers in America. Il-  
 lustration shows our "Telescope"  
 Car Loading Spout which has chain  
 connections, and consequently, a  
 greater degree of flexibility. We also manu-  
 facture the "Standard" Spout which has  
 link connections. Either type can  
 be furnished in any length, diam-  
 eter or gauge of steel.

512 page  
 catalog gives  
 prices.

**Favorite Elevator Bucket**  
 "The Name Tells All"

Made especially for use in Elevators and Flour Mills,  
 this bucket is all its name implies. Made in numerous  
 sizes—small sizes of tin; larger sizes of steel.

Send for catalog which gives carrying  
 capacity of each size, and prices.

**WELLER MFG. CO.**  
 CHICAGO



THE WATKINS SERVICE CHICAGO